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A CASE OF TETANUS.*

By THOMAS WYLLIE, M. D.

Physician, Toronto Western Hospital, Reported by G. H. Carveth, B. A., M. D., Surgeon, and Lelia A. Davis, M. D., Pathologist, to Toronto Western Hospital.

I. W. a girl of fourteen, unusually large and well developed, and previously strong and healthy, while playing in a garden stepped on the tooth of a rake with such force that it passed through the sole of her boot into her foot, making a wound of some depth. No physician was consulted and the foot was bathed and poulticed until the wound was healed.

On May 31st, three weeks after the accident, having in the interval shown no symptoms of constitutional disturbance, she began to complain of stiffness, at first in the jaws and afterwards extending over the whole body. The next day she had a convulsion. Dr. Wyllie was called in on June 2nd and found the usual symptoms of tetanus: rigidity of the muscles of the jaws, neck, limbs, and abdomen,—the head partially retracted, angles of the jaws drawn downward, inability to change her position or to swallow, except fluids in very small quantities, frequent and very painful tonic spasms, hyperæsthesia of the whole body, especially marked at the point of the wound, sleeplessness and constipation. Temperature 102 pulse 120.

The following afternoon June 3rd, she was removed to the Toronto Western Hospital. Before the next morning, she had two very severe paroxysms, after consultation with members of the staff, it was decided to place her in an open tent on the Hospital grounds, where she remained while under treatment, (see photo). 10 c. c. of anti-tetanic serum were injected June 4th, and this was repeated on the two following days. An ice-bag was applied to the spine and continued until the temperature was normal. The usual anti spasmodic treatment was ordered. Cannabis Indica, discontinued in a short time, because of its causing soreness of the tongue, chloral hydrate, in 30 gr. doses, every four hours until the spasms became less frequent and severe, then night and morning for a few days. The patient however frequently refused both medicine and nourishment, and, after the first week, no medicine of any kind was given.

Nourishment consisted of milk, given, at first in very small quantities, through a glass tube. She was able to take solid food first on the 20th day of her illness, she was given all the cold water she could be induced to take.

The bowels were left quiescent for a week and then moved by enemas.

* Read before the Staff, Toronto Western Hospital.

The temperature became normal on the evening of June 4th, and, with the exception of a few temporary rises, remained so. The pulse varied between 80 and 100. Blood and urine normal. During the first few days she suffered much from the painful spasms, after which they gradually decreased in frequency and severity. She began to sleep better so soon as she was moved to the tent; and, after a few days, slept through the most of the night, and, at intervals, in the day-time. She was able to partly turn herself June 10th; and, when she left the Hospital June 24th, she was practically well.

An especial point of interest in the case is the unusually long period of incubation, 21 days, from 5 to 10 or 12 days being the ordinary limits



The Tent where patient was treated.

The rule appears to be—the longer the incubation period, the milder the course of the disease, and the more favorable the prognosis.

Another point of interest is the open tent treatment, which is opposed to the common idea of the necessity of the exclusion of light, draughts of air, and ordinary out of door noises in the treatment of tetanus. In this case the patient was more exposed to the light than in an ordinary room in the hospital, and no effort was made to protect her from the outside air.—

The results were entirely satisfactory, as there was a progressive improvement in the condition of the patient from the time when she was placed in the tent.

THE TREATMENT OF PNEUMONIA.*

By J. C. MITCHELL, M. D.

MR. PRESIDENT AND GENTLEMEN,—It is my privilege to introduce for your discussion a subject upon which it is difficult to find anything to say that will be new.

So much has been said, and much so well said, that "I am but a gatherer and disposer of other men's stuff."

The subject is like human love, as old as man, but always new, and always interesting; inasmuch as every case presents some phase or type differing from any other.

So varied has been the treatment that many cases have recovered in spite thereof, cases where "the remedy was worse than the disease", while many others have proved fatal where the management has been the most scientific and best approved.

Undoubtedly all present have had patients recover from the most severe attacks, in the most unfavorable surroundings, under most unsanitary conditions, and, vice versa, have had them succumb when the environment, the nursing, and the general treatment have been all we could desire.

We have been called to cases that, from our knowledge of the patients' constitutions, severity of the attacks, general appearances, etc., we have not expected recovery; yet, after a hard fight, such have been restored to health. Again, at our first visit, we have been most cheery, feeling we had a hopeful case to deal with, but, after a few days, some complication, such as an attack of heart exhaustion, altered entirely our sanguine feeling, and we have been compelled to see our best efforts under defeat.

Possibly in no other disease have we such extensive pathological changes, with complete restoration of the parts, as in pneumonia, nor have we any better instances of spontaneous recovery under certain conditions and circumstances.

As it is an acute specific fever caused by a variety of micro organisms, with a tendency to self-limitation, at first view the expectant plan of treatment might be considered the ideal one to adopt.

Unfortunately, cases do not all recover, and death may be referable to exhaustion of the bodily forces as a whole, or some of them in part, especially the heart, to violence of the invasion and crisis, prominence of toxæmia, failure of respiration, from the extent and severity of the pulmonary invasion, and excessive pyrexia, or the many possible complications.

So much depends upon constitution, severity of the attack, and complications, that we are not justified in strictly adhering to the expectant

* Read before the Ontario Medical Association, Toronto, June 4 and 5.

plan, but should place ourselves in position to anticipate by treatment all that tends to a fatal termination.

" Off expectation fails, and most oft there,

" Where most it promises".

Two points should be prominently in view before us: the exact nature of the seizure, and the constitution of the patient.

Two courses then are open to us, either to treat the disease specifically, or to enter the wider field of symptomatic treatment where we meet and anticipate the many indications to relieve distress and sustain life until the disease runs its course.

Our increasing knowledge of bacteriology, and the introduction of specific remedies, afford ground for the hope that we may speedily discover a means of combatting the causes of pneumonia, and cutting short the process as we now are enabled to do in diphtheria and some other diseases.

The increasing evidence of its microbial origin has placed it among those diseases to which the serum treatment is applicable.

The researches of Friedländer, Fränkel, Klemperers, Bros Washbourn, Townsend, Coledge, and many others, have at present made no further claim for sero-therapy than it may produce the earlier occurrence of the crisis, and modify the course of the disease.

We may say with Macbeth: " We have scotched the snake and not killed it".

Many of us have tried treating the disease specifically by use of drugs, our ideas being to inhibit bacterial growth by rendering the blood a less suitable medium therefor, the principal drugs employed being quinine, guaiacol, carbonate and creasotal. My own limited experience with this method has been with the two former drugs, and the results have been such as to encourage me to persevere in this line.

A man cannot speak with authority upon the merits of a drug which he has used only twice, and yet, when so well defined a disease as that now under discussion behaves in an altogether abnormal way, in two consecutive cases, one must place some measure of importance upon the agent employed.

On Sunday, April 27th, began one case, typical in onset temperature 103°, pulse 100, hemorrhagic sputa, hurried respiration, dulness under percussion at base of left lung, with every other local physical sign of lobar consolidation; under guaiacol carbonate in divided doses of 48 grains daily, the temperature fell below 100, and the pulse below 90 before the 3rd day, and did not rise again, though the changes in the lung went through the customary procession. Most wonderful of all was the rapid-

ity with which the tongue became clean ! We were disposed to consider the course of the attack freakish !

On May 8th, the next case appeared in a man of 55, a classic onset complicated with delirium, even to involuntary defæcation. In the first 24 hours he received 30 grains of quinine, and was then placed upon guaiacol in the same doses as in the last case. History repeated itself, and the success of the treatment was as marked as before. On the 2nd day the thermometer showed 99.2, the 3rd day 101.2 and never afterwards did the fever reach 100. The tongue cleaned wonderfully, though every local sign showed the ordinary disease course. I quote our patient's own words concerning his general condition, " Those were good powders, every one seemed to help me ".

In both cases the drug was used early and in good doses. We have not passed judgment yet but are thinking.

" Some griefs are med'cinable ", so the distress and grief in this disease is amendable to treatment. In symptomatic treatment we not only treat symptoms as they appear, but endeavor so far as possible to anticipate those conditions which may arise to antagonize our efforts on behalf of the patient.

A very important indication is to spare, and freely support, the physical strength from the beginning, for the body is taxed far more by disease due to micro-organism than by that due to simple change of temperature or traumata. Particularly is this the case if the patients are weakly, debilitated subjects or alcoholics, with little power of repair or recuperation.

This is quite contrary to an axiom of an old physician of my acquaintance in my student days who said " Give me veratrum viride and the lancet and I defy inflammation ". He always attributed the passing of a patient to the happy hunting grounds which did occasionally happen, to " the poor constitution of the patient ", " that he had not been called in time ", or to " the will of High Heaven ", never once dreaming the treatment could be at fault. Of course vesication had to be freely produced in addition to those other *mild* remedies. The one thing that counteracted the injury due to such treatment, the patient was always given a liberal supply of whiskey.

Danger arises so often from enfeebled action of the heart, and deficient aeration of the blood, that our plan now is to maintain the patient's strength to the utmost possible extent and relieve symptoms.

In the first stages of pneumonia, venesection may be practiced in some selected cases where there is lividity and danger of asphyxia. It should, however, be used with great caution, for we have practically, in

the stage of engorgement, an intra visceral hemorrhage, varying in amount according to the severity of the attack from two to four pints.

Later on in the disease, when we have a loaded right heart, accompanied with dyspnoea and cyanosis, a moderate venesection would be rational treatment, and on this point we particularly hope to hear from some who have adopted this plan.

At our first visit to a typical case of pneumonia, our aim should be to make the patient as comfortable as possible and to fully grasp the situation in all its bearings. Place the patient in as good a position to fight his battle as his environments will permit, *i.e.*, as to room, bed, clothing, posture, ventilation, etc. Emphasize the great importance of perfect rest. The pain will depend upon the sensitiveness of the patient, and the amount of pleural involvement, and will usually be best relieved by a proportionate hypodermic injection of morphine, the smallest dose that will relieve being the best. I have never found occasion to use over one quarter of a grain, and generally found a sixth quite sufficient. Pain relieved the dyspnoea also disappears. If there be much fever a diaphoretic and diuretic are indicated; small doses of acetanilid with caffeine being very good to begin with as a diaphoretic. The condition of the bowels must be looked after in order to preserve gastric and intestinal digestion. I usually order calomel or blue mass to be followed by a saline. I endeavor to arrange the medicinal part of the treatment, to keep the patient comfortable, not lower vitality, or derange stomach. Only in exceptional cases is it necessary to order stimulants at first.

As to local treatment. I apply repeated sinapisms with cotton wool jacket, or hot fomentation, and do not object to an ice bag if available. I prefer the first mentioned, particularly where I cannot procure a competent nurse as so often occurs in the country. To the nurse I urge most strongly the great importance of attending to all the details of her duties, and again lay stress upon the necessity of perfect rest and quiet. I give the patient all the cheer and hope I can, and do not dilate upon or explain to him his condition, remembering:

" From ignorance our comfort flows,
The only wretched are the wise ".

The pain not likely to give much trouble after the first two days and after the hypodermic of morphine it is usually well controlled by small doses of pulv. ipecac. co., which also acts as a diaphoretic. If pain be not severe, I prefer small doses of acetanilid with caffeine as it does not derange the stomach. The febrile condition is usually quite sufficiently controlled, if we keep the skin moist. The dyspnoea may be relieved, or at least greatly benefitted by good ventilation.

At subsequent visits, I not only ascertain carefully the condition of the lungs, but I look particularly after the heart, and guard against any possible complications so as to anticipate danger, for "Trifles light as air are to the jealous confirmations strong as proofs of Holy Writ", and a patient's life may frequently be saved by attention to little things.

The general management, nursing, diet, and local measures, much as before; the medicines may be changed; usually our patients require a sedative cough mixture after second day, and after four days the diuretic and diaphoretic may be changed for an acid quinine mixture. I give stimulants as indicated, and strychnia for heart, particularly in alcoholics. When a man is stricken down with pneumonia it is good to be able to say,

"For in my youth I never did apply
Hot and rebellious liquors to my blood".

If I find the heart failing, I push the stimulant to as much as eight ounces per day, and strychnia is required. The latter either as liquor strychnia, in tablet form, or better still hypodermically.

For urgent dyspnoea and lividity, inhalations of oxygen, if it can be procured. This is one of the things we are debarred from using in the country, but we can have plenty of fresh air.

I always look upon delirium as a grave symptom, and it requires most careful attention; cold to head, good feeding, and intelligent use of alcohol.

For the insomnia with delirium we so often have in severe types of the disease, I usually try bromides and chloral, trional, sulfonal, etc., but in several severe cases I have had who were also alcoholics, I have found a judicious use of morphia give a comfortable sleep when all other remedies failed.

Although we no doubt would all prefer to have our pneumonias occur among the prohibitionists, at the same time I have had such a large percentage of my inebriates recover that that class need not despair and lessen their chances by an undue fear of death, for,—

"The sense of death is most in apprehension".

Unless the pyrexia is over 104° Fahr., I do not use anti-pyretics only in just sufficient amount to keep skin moist. If the temperature is about this point I use tepid and cold sponging, ice packs, etc., before resorting to the use of anti-pyretics internally.

Diarrhoea I always watch for, as it is a serious complication and must be controlled by suitable measures.

Of course, we never forget that the nature of pneumonia is to terminate with a crisis, and this may occur at any time from the 3rd to the 14th day, or even in very serious cases a still longer time may intervene,

In these long cases nourishment is urgently needed, and for this reason the stomach must be carefully guarded.

The crisis often makes a severe demand on the bodily resources, and both food and stimulants have to be administered very freely indeed, not only at the time but for some days afterwards.

Just at this time, when there is such a demand on the physical resources, we sometimes have complications appear one after another ;

“ One wee doth tread upon another’s heel,
So fast do they follow ”,

and our best efforts are in vain. In fact we may see this at any stage of the disease.

When the crisis is passed in safety, reduce gradually the stimulants change the food slowly from liquids to that having more consistency but easily digested, change the medicines as indicated by state of stomach, and use expectorants as may be required.

If the lung does not clear up after the crisis, I find that it is as Mitchell Bruce says “ an unresolved pneumonia is usually unresolved pleurisy ”.

Convalescents must be treated as in all other diseases according to their needs.

Now, gentlemen, in closing this resume of my ideas on this most important subject, I would suggest the discussion be particularly along the following lines,—

1. Has sero-therapy been tried and been successful outside of Hospital practice ?
2. Has the experience of any been such as to make him an enthusiast over specific treatment by drugs ?
3. Have you had definite good or damaging results from venesection ?
4. Has any one seen unfortunate results from the use of coal tar derivatives even where used in sthenic cases ?
5. Is there any remedy in cardiac exhaustion equal or superior to whiskey and strychnine ?
6. Does any one think the hot poultice has any advantage over the pneumonia jacket ? Is it an advantage to change the jacket at stated intervals ?
7. Do we get beneficial results from vesication at any stage of the disease ?

CANCER OF THE BREAST.*

T. K. HOLMES, M.D., Chatham.

SINCE the teaching of Halstead and others has led surgeons generally to adopt a very radical method in dealing with cancer of the breast, this disease has lost some of its terrors and a fair hope of permanent cure may be entertained in many cases. It is to present a report of three cases of this disease that I write this short paper, hoping this history may be of interest to the association.

The first case shows that even in an advanced stage a cure may be possible, and the other two cases the influence, positive or negative, of removal of the ovaries on mammary cancer.

Case I. Mrs. W. aet. 54 of good family history has had a large family and personally has always had good health until May, 1897 when she observed a small tumor in the left breast. It was hard and moveable and for three months caused little pain or inconvenience but after that time it increased rapidly in size and became very painful. In June, 1898, it had attained a very large size and the most prominent part of the tumor had ulcerated, showing destruction of the skin as large as a silver dollar. The pain had become severe and the loss of rest, from this cause alone, gave her a worn haggard appearance. On July 7th, 1898, I removed the breast and axillary glands after the method practised by Halstead, removing the pectoral muscles and all the tissues in the axillary space leaving the nerves and vessels completely bare. As a very large portion of skin had to be removed there was considerable tension when the sutures were tied and this upper part of the wound healed by granulation on that account. Three years and eleven months have elapsed since the operation and the woman has had no return of the disease and is in perfect health.

Case II. Mrs. K. aet. 55 years, has had two children. Father died at the age of 76 from pneumonia and mother at 72 from renal calculus. Three sisters and a brother are healthy. After the birth of her second child she had septicaemia, pelvic inflammation and phlegmasia alba dolens in both legs. This sickness left her an invalid for a long time with swollen legs, pelvic pain and tenderness and inability. The uterus, when I first saw her, was fixed in the pelvis and there was evidence of extensive and dense adhesions of all the pelvic organs. This condition of invalidism continued about ten years, when she finally consented to an operation for removal of the tubes and ovaries, which I did on March 10th, 1892. There was a good deal of difficulty in the operation on account of the

* Read before the Ontario Medical Association, Toronto, June 4 and 5.

dense and extensive adhesions but she made a good recovery and her general condition was very much improved. During the winter of 1897-'98, she wrote me from Virginia, where she was then living, that there was a small tumor in her right breast and I at once advised her to consult Dr. Halstead, of Baltimore, but, this was not done and in April 1898 she entered the General Hospital at Chatham and on the 5th of that month I removed the breast as in case II. For nearly two years there was no return, then a small nodule appeared about midway between the ends of the first incision. This was excised by a southern surgeon and a few months later another growth and a part of a rib beneath it was removed by the same surgeon. Early in May of this year, she again came under my care at Chatham when I found a hard bluish mass firmly adhered to the ribs about midway between the ends of the primary incision, and as large as the top of our ordinary teacup. It was unmovable and painful and there was a small ulcerated sput at its centre. As the case seemed inoperable I advised treatment by the x-rays which I had known to prove beneficial in a case of superficial cancer. She is at present undergoing treatment in that way, but sufficient time has not elapsed to know with what result. This case is instructive as showing that, however beneficial removal of the ovary may be in curing mammary cancer, it did not in this case prevent the development of the disease.

Case III. Mrs. J. J. married and has had three children. She first came under my care in July, 1896, suffering from laceration of the cervix and perineum and inability to articulate distinctly on account of a partial paralysis that occurred a year earlier and a few days after the birth of a child. On July, 6th 1896, I repaired the lacerations and her health soon improved although her speech remained somewhat imperfect. In Sept. 1897, I detected a suspicious looking tumor in left breast, near the nipple, and on the 9th, of that month performed the Halstead operation. Fifteen months later, or on Dec. 12th, 1898, I removed a small nodule from near the scar of the former wound and similar nodules appeared and were excised on May 16th, Sept. 27th, and Nov. 1st, 1900, March 8th, and May, 26th, 1901. On July 26th, 1901, I removed a hard mass from the axilla and in doing so I found it necessary to exsect a portion of the axillary vein which was so involved in the growth that it could not be detached. On Aug. 12th, and Nov. 10th, 1901, several cervical glands were removed. Within the next six weeks numerous other cervical glands became involved and were so situated that further operation for their removal was deemed inadvisable. Knowing that some favorable results in such cases had followed removal of the ovaries, I decided to offer her this chance. She willingly consented, and on Jan. 6th, 1902, I

removed both ovaries and tubes. In a few weeks the enlarged gland began to diminish in size, the pain to abate and, at the end of three months, no vestige of either remained. At present, five months after the oöphorectomy, she is apparently free from the disease and in the enjoyment of good health. In this case, ten operations in all were performed for the breast disease, four of which were of a rather severe character, and it is to be hoped her courage and fortitude may be rewarded by what seems at present to be a complete cure.

KEMPFER V CONERTY.

BEFORE the Hon. Mr. Justice MacMahon, at Perth, Wednesday the 30th day of April, 1902.

This case was set down for trial in the spring of 1898, B. B. Osler, Q. C., for defendant and Watson for plaintiff. An adjournment was granted owing to absence of a medical witness for plaintiff. Following this was an argument in Toronto, regarding costs, which was decided in favor of defendant. Then in the fall of the same year the case again came down for trial, with the result that, after a three days fight, the defendant obtained a non-suit and judgment for costs. Appeal was made from this decision to the Divisional Court, where the plaintiff was granted a new trial and defendant ordered to pay costs to date. On advice of defendants counsel, the late B. B. Osler, an appeal was made from this decision to the Court of Appeal, where after a long delay a very nice decision was given. A new trial was still granted the plaintiff but a strong recommendation was made that the judge at the trial should take the case without a jury, also that all costs must stand until the final disposition of the case by the trial judge. The case was set down for new trial in the spring of 1901, but owing to the illness of Dr. King, who was a witness on the case on behalf of the plaintiff a postponement was obtained.

Again the case was on the list for trial at the Fall Assizes but was again postponed owing to illness of defendant. After this an argument in Toronto *re* request of plaintiff to alter order for adjournment—not sustained. Then on May last both parties appeared to be ready and the case went to trial with the result as shewn in the Judgment of Justice MacMahon.

JUDGMENT.

This case has been very thoroughly discussed, and the points have all been elaborated with great care by counsel on either side, with their

usual ability. No legal questions are involved and I have simply to deal with the facts.

The boy Thomas Kempffer, on the 11th day of September 1896, being then ten years old, fell from a tree and sustained a fracture of the radius, commonly known as a Colles' fracture. The height from which he fell is unknown, and he was unconscious when brought to his father's house. Dr. Bell, who occupies a distinguished position amongst the surgeons of the Dominion, and is connected with the principal hospitals in Montreal says that in the production of a Colles' fracture the force is almost always on the palm of the hand and the ball of the thumb. When the boy was brought home the defendant was called to see him and after examining the arm returned to his surgery to get the necessary splints to be used after the fracture was reduced. He then returned to the Kempffer house and after washing the boy's hand, he with the assistance of the two women, Jacobs and Hill, reduced the fracture and then proceeded to put the arm in splints. A question has arisen as to the size of the splints, and it has been urged that I should rely on the evidence of Jacobs and Hill as to their size in preference to the evidence of the attending surgeon. During Mr. Watson's argument I pointed out to him how often the man Jacobs said he did not recollect what took place, and since then I have procured from the stenographer a statement, taken from his evidence, as to what he did *not* know. He said "Before the doctor came I looked at the hand or wrist I suppose; I did not take much notice to it. Did not notice marks on hand. Did not notice where the material for bandages came from. Did not notice whether the splint differed in width throughout its length. Did not notice whether the doctor had other splints there. Did not notice whether much or little batting was put under splint. Could not tell whether anything was put between the thumb and hand. Could not tell if strings were put around the bandage. Did not know anything about the boys color; did not watch to see if it changed. Supposed the boy was unconscious; does not know. Does not know whether the arm was washed before the boy became unconscious or not. Did not see where the splints came from. Could not tell where the batting came from. Did not notice whether a wad of batting was put in the hand. Could not tell whether the batting covered the whole hand before the splint was put on. Thinks the bandage was opened up once, but did not notice whether more batting was put in. Did not notice the width of padding placed in the hand."

It struck me at the time he was giving evidence, that either he was not an observant man, or that he was occupied in the duties assigned to him by the doctor of looking after the chloroforming of the patient;

that when one comes to consider the position occupied by the defendant as a surgeon in attendance on a patient with an injury of the nature described, and feeling that his reputation as a physician and surgeon was at stake, and that the greatest care and skill that he possessed should be given in dealing with the injured arm, I could not come to the conclusion that these men who were not interested in the kind or size of splints that were required for the purpose for which the doctor was called upon to use them, are not likely to be correct in the evidence they give either as to the size or the material. The doctor says that he had a number of splints in his office, some of which he made himself, and others that he had purchased. He states that the splints were about two and a half inches wide, and that they were both of wood. The witnesses Jacobs and Hill stated that the splint was put on the back of the arm was of pasteboard, and that the one placed on the front of the arm and palm of the hand was of wood, and only an inch and a half wide at its widest part. Mr. Hill is connected with the family of the plaintiff by reason of his having married Kempffer's sister, and while I do not say that he is not desiring to state exactly what is true, he has no doubt heard the subject discussed from Kempffer sources, and I do not regard his statement under the circumstances as being entitled to the credit that I give to the evidence of Dr. Conerty, and I find that the two splints were of at least the width of two and a half inches. With regard to the course adopted by Dr. Conerty in putting on the splints I think the evidence of Hill strongly supports the statements made by the defendant that every precaution was taken as far as the hand was concerned to give it sufficient padding to prevent any injurious results arising from the use of the splints. Dr. Conerty said that the splint was padded with batting, and that he had put a ball of wadding in addition to that padding in the palm of the hand, and that the splint covered the whole of the palm down to the metacarpal bones, and that the hand was well filled with padding. As I say, he is confirmed in that statement by Hill, who says, "There was batting on the palm of the hand under the splint, and a little under the splint on the front of the arm. He made a change and loosened the bandage and put some cotton batting under the splint." This shows that after bandaging had proceeded to a certain extent, the doctor, thinking it advisable to add some additional batting, opened it up and put in an additional quantity of batting in the palm of the hand. It was urged that the splint went down to the end of the fingers. I think Mr. Watson properly abandoned that, as Hill himself said, and Jacobs said, that the splint only went as far, as I think he stated, to the end of the palm.

A question has arisen as to the manner in which the bandage was put on the arm. Most of the surgeons say that the proper course is to

commence at the bottom and bandage upwards, but they all say that it is immaterial in which way it is done, so long as there is no undue pressure of the bandage on the splint, so long as there is no pressure that would prevent free venous circulation. Dr. Conerty says that he did not adopt either of these methods. He commenced in the middle of the splint with the bandaging and proceeded to the top of the splint and then down to the middle of the hand. There was a good deal of evidence given by Jacobs and Hill as to the position in which the thumb was when the hand was bandaged. They say that it was bent in on the palm of the hand, and that that was the position in which the surgeon bandaged it. Dr. Conerty stated that he adopted the course sometimes adopted in cases of this kind, and bandaged the thumb on a line with the index finger. Most of the surgeons who were called both on behalf of the plaintiff and for the defendants say that it is an unobjectionable course, but the majority of them prefer the other method. I think one of them, Dr. Sheppard, said he had heard of it, and he knows that the system is spoken of in the books on surgery. However, they all concur in stating that unless the bandage was so tight as to cause pressure on the thumb and bring it in, that no evil results were likely to follow or should follow from the treatment.

The splints were allowed to remain on the arm for some twenty-three or twenty-four days. When the splints were removed it was found that there was a complete knitting of the bones of the arm, and that with one exception, no trouble was expected to arise from the condition of the hand. The plaintiff, or his mother or father, do not complain of the condition in which the arm which was fractured was found when the splints were removed. The result was all that could be desired. It is as to the condition of the palm of the hand at the ball of the thumb. The doctor says that when he saw the boy first there was, according to his observation, a slight swelling, and some redness in the vicinity of the ball of the thumb, about the size of a twenty-five cent piece, and it was stated that the injury was situated in a place where it was likely to have been the result of the impact when the boy fell. That is the place likely to be injured when a Colles' fracture takes place. Dr. Conerty did not apparently regard it as at all serious. Perhaps there was no indication that there was any great injury to the hand and with that idea he treated the hand as if no serious result was likely to follow from bandaging it in the manner stated. When the splints were removed it was found that in the region of the ball of the thumb where the injury was caused, there was a deadening of the tissue and a cicatrix has formed, and the doctor finding that, took upon himself, as he was obliged I think to do under the cir-

cumstances, the treatment of the thumb so as to bring it back if possible to its normal condition. He thought that the necessity for an operation might be avoided by a massage treatment. Dr. Sheppard, Dr. Bell, and I think most of the surgeons with the exception of Dr. King, say that while that condition of the thumb existed it would be improper to perform an operation, and Dr. Bell pointed out that one of the serious objections to operating at that time was the probable existence of micro-organisms, and if the operation was conducted while these were in existence in the hand, that it might result disastrously to the patient. He considered that the hand should be thoroughly healed before an operation was attempted, and I find from the evidence before me that that would have been the proper course to pursue. Now the healing was effected by the last of December, or first of January, and the doctor thought that by constant massage the necessity for an operation might be obviated. The mother of the boy says that the defendant endeavored to move the thumb and did move it slightly; that the motion caused pain, but notwithstanding that, Dr. Conerty thought that by continuous use of the massage treatment the thumb would come all right and a perfect cure effected within six to twelve months time at the latest. On the 4th of October, 1896, the doctor removed the splints, and he saw the boy again three days afterwards on the 7th of the month. Between the 7th of October and the 16th of November, although he had been asking the mother of the boy to bring him every day, or every other day, to his surgery, she had neglected to carry out his instructions. After that he only saw the boy twice during December, on the 2nd and the 7th, and then in January he saw him five times, on the 16th, 17th, 20th, 28th and 30th, and four times between the 2nd and 9th of February. He saw nothing of the boy at all until June, when he supplied him with a plaster cast for use on his hand. The cast was produced here, and from its appearance, if the boy had been using it, the thumb would when placed in the cast be some distance from the index finger, and he (the boy) said he had been using it from time to time until he brought it back to the doctor's office in August and left it there, stating to the person in attendance that he used it as a paddle when he was out swimming.

Now, having regard to the treatment Dr. Conerty had prescribed, which as he told Mrs. Kempffer could only be carried out by the boy being brought to his surgery for treatment, one cannot say that the present condition of the thumb is owing to any want of skill on the doctor's part. Whatever neglect there was, was not his neglect, and from the evidence of Mrs. Kempffer herself it is quite apparent that the doctor was finding fault with her for not making the boy keep his appointments

in going to the surgery for treatment. That is borne out also by the evidence of the housekeeper, Mrs. Hunter, who says that she was present on one occasion when Mrs. Kempffler brought the boy there, and that the doctor was much dissatisfied with the condition in which the boy's hand was, and told Mrs. Kempffler that no progress towards a cure could be expected owing to the neglect of the father and mother in seeing that the boy came regularly for treatment. The findings I have made exonerates the defendant from the charge of a want of skill or care. The reduction of the fracture was perfect, and the condition in which the thumb is now found arises from want of care and attention on the part of the parents of the boy, and of the boy himself in not submitting to and following out the defendant's instructions.

The action will therefore be dismissed.

THE ROLE OF EDUCATION IN THE DEVELOPMENT OF SELF CONTROL.*

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EDUCATION, of course, is not to be considered as limited to the formal teaching of the schools. It is unnecessary for me to say that very much the larger and much the more important share of the practical knowledge which a man gains is acquired wholly apart from the schools. Nevertheless the value of proper instruction and of suitably graded instruction in the schools is beyond estimate, and the purpose of my paper is largely to ask if the system of education at present very generally in vogue takes full cognizance of the possibilities of the public school in the development of a certain very important trait of character.

It must be expected that the old proverb "many men, many minds" will apply to the question of education just as to any other debatable subject.

There are many thought to be good thinkers, who cannot see that the educational system of to-day is an improvement upon that of say a half century ago. Many accord with Herbert Spencer in his contention that, from a practical standpoint, a scientific education is of much greater relative value than a literary one.

And the kindergarten method, and various systems somewhat similar to it in conception, have each their enthusiastic advocates. With

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all this variety of opinion, however, the plan which finds most general acceptance still is that system which has noted the need for changed methods in education in correspondence with the changed conditions of life brought about by recent discovery and recent advance, and which being the "survival of the fittest" must be supposed to suit the requirements better than any other mode which has yet been suggested.

It is, nevertheless, occasionally argued, and argued by men whose opinion is well worthy of consideration, that our present day educational methods tend to unfit men for the practical pursuits of life. It is stated that too many subjects are attempted, that thoroughness is rendered impossible on account of this multiplicity, and that in consequence a habit of carelessness is encouraged. Moreover, the claim is urged that a liberal literary training has not only the effect of rendering attention to business affairs distasteful to the average mortal, but that mental pre-occupation naturally resulting from wide learning prevents that entire devotion to business which is essential to success.

Exceptions there are, of course, for every one can point to men who combine singular business ability with broad culture. Such men are, however, unusually endowed and it is in but a small proportion of our successful men of business that literary talent is conspicuous.

It is not sufficient contravention to this argument to assert that a business life is not the ideal life; that true happiness does not follow the getting of sordid gain; and that mankind would be much the happier as well as the wiser if men attended more to the cultivation of the mind and less to the accumulation of wealth. However much one may sympathize with such a sentiment, the plain fact remains that the majority of people prefer wealth to culture, although there are undoubtedly many, who earnestly strive to attain both. And inasmuch as we have to deal with the majority, this fact must be faced, and dealt with in a reasonable spirit.

Now to the alienist this matter is one of practical interest. The strenuous efforts which many conscientious people put forth to "broaden" their minds is, far too often, a direct offence to physiological law.

The mental capacity of most men is sharply limited, and the capacity for an intelligent and well-thought-out interest in many diverse things is likewise definitely circumscribed. The attempt to keep well informed sooner or later brings on a condition of fatigue.

The individual's power of concentration lessens, the attention becomes enfeebled, and the control over self diminishes in proportion and thus the broadening influence of a liberal education, so ardently desired by many an honest soul, is entirely missed, and definite harm is accomplished.

The deduction is sufficiently plain. Instead of urging to greater effort the pupil who is beginning to realize in its full meaning that "much study is a weariness of the flesh" his case should be given special consideration and such restrictions should be put upon the quantity and quality of work required of him as might seem necessary as a preventive of overstrain.

All who have to do with the insane know how striking a feature in many cases, is a loss of the power of self restraint. Some even go so far as to consider insanity as but a manifestation of the loss of self control.

Thus it is said of Pinel that the first question addressed to a new patient was always "Have you suffered vexation, grief or loss of fortune"?

It was his firm conviction that painful emotional states play a very important part in the causation of mental disorder. But such states are common to all men, and it is only in those who are not properly schooled to the control of them that disaster is occasioned.

Putting the matter in another way, Clouston declares that "sufficient power of self control should be the essence and legal tests of sanity, if we had any means of estimating it accurately." And, were it necessary, I could quote many other authorities to the same effect.

In this chapter on growth of character, Oppenheim contends that in education one great factor has been forgotten, and that is the youth's knowledge of himself. He should not only be made familiar with the conditions and requirements of a business or profession, but should "have an equally thorough training for the vocation of living" and Donaldson declares that "the act of living is the most important natural educational process with which the human body has to do." These seem like reasonable statements, but their full meaning is not apt to appeal to one at first thought. Consider them in connection with a quotation from Maudsley:

"It may justly be questioned whether the whole system of education at the present day does not err on the side of dangerous indulgence no doubt such harshness and neglect as might be likely to repress cruelly a child's feelings and to drive it to take refuge in a morbid brooding, or in vague and visionary fancies, would be a great wrong, but a foolish indulgence, through which it never has infixes in its nature the important lessons of renunciation and self-control, is not less pernicious. Can it be wondered that persons whose minds, when they are young, have never been trained to bear any unwelcome burden, should break down easily into insanity under the strain of severe trials in later life"?

"The aim of early education ought to be sound intellectual and moral discipline rather than much learning of any sort; to fill a child's mind with details of knowledge in order to make it a prodigy of learning is

likely enough to prepare for it an early death or an imbecile manhood; but nothing can be better than the careful fashioning of its intellect into a trained instrument by which knowledge may be acquired readily, and with habits of accuracy, and the formation of a stable character which, through the constant practice of self denial obedience, self control, shall embody those lessons of a good moral experience which the events of later life will not fail to enforce rudely."

Such being the opinion held by so high an authority upon the value of proper self-control, does it not seem eminently right to make every possible provision for a full development of this trait; which is undoubtedly of much importance in the "Vocation of living"? and inasmuch as perhaps the greatest amount can be accomplished in this direction during the earlier and more impressible years of life, it does seem to me that the school course, which is so important an element in the life of the child and the youth, should be modelled with a view to attaining this end. Is it possible that we may not reach to that "best education" which, according to Maudsley "would be the strongest barrier against mental derangement, which it would be possible to raise?"

Now while it is easy enough to dream of results, it is not so easy to suggest methods which will give us the results we seek. Nevertheless there are a few matters worthy of reference which may possibly be indicative of the direction our quest should take.

As to the effect of formal education upon the brain cells, we are without definite information. We know that the cells are already formed and are numerically complete at birth, and that any change effected thereafter is only in the direction of modification—not of multiplication. School training however, strengthens formed structures and arouses dormant elements to further growth and organization, and the importance of this can scarcely be over estimated. Thus Donaldson asserts: "The intensity with which any form of exercise is carried on during the growing period leaves its trace, and the absence of it at the proper time is for the most part irremediable. Thus any lack of early experience may leave a spot permanently undeveloped in the central system—a condition of much significance, for each locality in the cerebrum is not only a place at which reactions, using the word in a narrow sense, may occur, but by way of it pass fibres having more distant connections, and its lack of development probably reduces the associative value of these also."

Notwithstanding our lack of positive knowledge of the influence of educative processes upon the development of the central cells and in spite of our ignorance as to the relative order of development of the cells

engaged in the intellectual processes, sufficient data have been accumulated to enable very competent authorities to venture certain hazards. Thus Professor Patrick of the University of Iowa, argues strongly against the methods of teaching now in vogue in the primary schools. Both upon anthropological and psychological grounds he condemns the use of the reading book—the spelling book and the copy book by children under, say, ten years of age. Man has only recently become a reading and writing animal, and to quote Patrick's own words "It will demand a considerable maturity in the child before he is ready for that which has developed so late in the history of the race. The language of the child, like that of the primitive man, is the language of the ear and tongue. The child is a talking and hearing animal. He is ear-minded. There has been in the history of civilization a steady development toward the preponderating use of the higher senses, culminating with the eye. The average adult civilized man is now strongly eye-minded, but it is necessary to go back only to the time of the ancient Greeks to find a decidedly relative ear-mindedness. Few laboratory researches have been made upon the relative rapidity of development of the special senses in children but such as have been made tend to confirm the implications of the "culture-epochs" theory, and to show that the auditory centres develop earlier than the visual."

Another criticism of prevalent teaching methods is that of Oppenheim. I quote him as follows: "One must keep in mind that the faculty which governs mathematical computation is located among the higher centres in the cerebrum; that this part of the brain is among the latest to attain maturity; that therefore in childhood it is in no condition to put to a strain. Whenever a scholar at this age is forced into attempts to use this faculty, a process similar to any other sort of exhaustive work results. One can the more easily understand the inevitable outcome from a knowledge of the fact that the nerve cells of children being more or less in a state of unstable equilibrium, are easily exhausted, so that a consequent nerve poverty must show itself. Thus such children receive no permanent value from studies in mathematics, simple though they be; and what is more, if these studies were not begun until greater maturity—say at least ten years of age—not only would a vast amount of nervous wear and tear be saved, but also the children would learn as much in one year, as they formerly, under the present adverse conditions and methods, learn in five. The time thus saved might be profitably employed in strengthening both mind and body."

Now, if there is anything of real merit in these opinions, is there not need for certain reorganization of present-day methods? Surely the im-

position on the child of studies for which he is neither physically or mentally equipped cannot but be followed by disastrous consequences. Not only is there energy wasted and time lost, but it is also certain that the development of self-control is not encouraged by putting the immature brain cells to such unnatural strain as will almost inevitably exhaust them. On the contrary, it is reasonable to suppose that injudicious forcing may have the effect of causing irretrievable injury in this respect.

Of even greater importance than the curriculum is the teacher. A rational system of education would require as high a standard for teachers of elementary classes as for those of the advanced classes. There is infinitely greater opportunity to influence for good or evil, the pupils in the primary department than those in the advanced grades. Much greater damage may possibly result to the very young child, from the imposition of unsuitable tasks, than to one whose brain cells are more fully developed, and consequently more stable and less easily overtaxed. And at that period of life when imitiveness is the characteristic of the child, when, in fact, education practically depends upon his imitiveness, it is of the utmost importance, from all points of view, that the teacher should combine every good quality. It is very necessary, also, that the teacher should have a very good idea of the psychology of childhood and should have intimate knowledge of the physiology of this period, as without this knowledge it is impossible for the character of the teaching to be suited to the capacity of the pupil.

And yet how very few of our primary school teachers have any such qualifications. As further argument that teaching in the primary years should be of the highest order, it is perhaps scarcely necessary to refer to the fact that much the larger number of pupils derive all their teaching from the lower grades, and that comparatively few come under the influence of the teacher of the higher grades.

Another fact which is commonly overlooked is that the restraining or inhibitory function is the last to develop, which, as Oppenheim points out, is "chronologically correct, for a restraining force has no reason for its existence until the energy which it is meant to restrain is really present." And yet this is a matter of no small importance, inasmuch as, however well intended, ill-timed attempts to restrain children cannot meet with the desired response. Rather do they tend to make the child unhappy and irritable, and at the last are very likely to defeat the very end for which they were intended.

It is too much to expect (save in individual cases) to be able to get right to the child's home life and direct environment and the influences to which he is subjected there. Could we do so, a tremendous good might

be accomplished, for undoubtedly the greatest power in the moulding of character is the atmosphere of the home. But our inability to reach so far into the circumstances which make character only serves to render it more imperatively our duty to see that such of the nurture of the child as we can influence is of the best.

Self control is not only a necessary quality to success in life ; it is not only a very potent agent in the prevention of mental disturbance, but it is also a very important factor in determining recovery from an attack of mental disease. Therefore, to us as alienists, the question of the development of this trait is one of special and practical interest. For this reason we should not fail to exercise ourselves in behalf of any reform in present methods, which might possibly have an effect in bettering the development of the brain cells, and in thus rendering the individual less susceptible to disorder of the mental faculties. It is our plain duty to strive in every possible way to eliminate the causes of mental disorder. Here, it seems to me, is a legitimate field for the practical application of knowledge which our position as alienists presupposes us to possess. And at this present time, when the leaders in educational matters are, as I know them to be, striving very earnestly to make their methods meet the demands of rapidly changing circumstances, we have an unusual opportunity to use our influence in modifying requirements in accordance with our ideas of what those requirements should be.

Smallpox and Vaccination.

The number of the *British Medical Journal* for July 5, is devoted to the important subject of smallpox and vaccination. It is shown that smallpox appears to become epidemic in a small scale every four years ; and pandemic every thirty years, or so. A careful study of the methods of spreading the disease makes it clear that the chief governing factor is personal infection. It is also made clear that, to secure the full advantages of vaccination, re-vaccination should be made compulsory. Ample proof is advanced to show that where re-vaccination has been made compulsory, smallpox has been stamped out. Germany, Italy, Hungary, Roumania and Japan have compulsory re-vaccination, and Britain must fall in line. It is also urged that as vaccination is compulsory, the supply of vaccine should be under direct government control. This would ensure purity and would tend to give the public confidence. Further, it is shown that with proper care the complications can be reduced to a minimum.

THE MANAGEMENT OF THE VARIOUS FORMS OF NASAL OBSTRUCTIONS.

BY PERRY G. GOLDSMITH, M.D., C.M. Belleville.

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(Continued from July *Lancet*.)

(b) *Cases of enlargement of the entire osseous structure of the inferior turbinated body.*

Crushing outward of the bone may give a very satisfactory result in some cases, but, in doing so, the septum must not be used as a fulcrum. Here, too, the spokeshave may be the only means of securing sufficient room. Repeated cauterization of the mucous membrane rarely gives the necessary space. Partial turbinectomy, if the enlargement be localized at either extremity, may alone be sufficient. Some writers cannot condemn too strongly anything like complete removal of the turbinated body. I do not approve of it, except in very rare cases, when the operation is not only justifiable, but demanded to secure the proper space. As a matter of fact, one cannot remove the entire bone with a spokeshave; and, when he has removed as much as the instrument will engage, he will be surprised to find how much regeneration takes place in a few years. Dr. Abercrombie, Assistant Surgeon at the Central Throat Hospital, examined over two hundred cases, some years following the removal of the inferior turbinal, and he found that a surprising regeneration had taken place, while those few who had a dry naso-pharynx, as a result, much preferred this to the continual nasal obstruction. The operation has been spoken of as having caused more misery than any other nasal procedure. While there is certainly good ground for such a statement, the reason is that, being new and the immediate results good, too many performed it, when less radical measures would have been sufficient. In the partial anterior turbinectomy cases, we should be careful about making our posterior segment too broad, otherwise a partition will appear, dividing the inferior meatus into two parts. Slight trimming with a pair of nasal scissors, or cutting forceps, will obviate this. In any case of turbinal hypertrophy, any accessory serious mischief must be corrected, before operating, as it alone may be the cause of the hypertrophy. In the more radical turbinal operations absolute rest in bed is imperative, as secondary hæmorrhage is not at all infrequent. Oil sprays, or mild antiseptic, alkaline lotions, are not only healing, but very agreeable to the patient. Plugging causes discomfort and invites hæmorrhage.

(4) *Nasal polypus*.—I do not propose entering into any discussion on malignant growths of the nose, or naso-pharynx. In the *Practitioner and*

Review, I cited a very typical case of primary sarcoma of the right nasal fossa, causing nasal obstruction, frontal sinusitis, and orbital phlegmon. Polypi are one of the most common causes of either persistent, or occasional, nasal obstruction. The diagnosis is usually easy, though one often finds an unsuspected polypus, after he has removed some septal spur, anterior to it. Polypi may practically be said to always arise from the middle turbinal region, and, according to Grünwald of Munich, is usually associated with some accessory sinus disease. The treatment is by snare, or forceps, combined, or separate. When the polypi are numerous, one must have a number of prepared snares available, so that no delay is caused by fixing the wire, or through blood obstructing the view. One snaring and subsequent careful cauterization of the base of the growth may be all that is required; but there are many cases in which the polypi have existed for a long time, and are very numerous, that nothing short of thorough curettage of the anterior and probably middle ethmoidal cells will suffice to prevent recurrence. Frontal sinus, or maxillary antrum empyema, must receive appropriate treatment also. It should not be forgotten that nasal polypi, in old people, or people past middle life may take on a malignant nature, bleeding easily, recurring rapidly, and possibly associated with impaired health, loss of sight, and with bone enlargement. After removing polypi, Mr. Lennox Browne favors repeated cauterization of the area, and, in many cases, spirit sprays. One must not mistake the rare occurrence of a meningeal sack for a polypus. In doubtful cases, careful aspiration of the contents of the sack and chemical examination will suffice to differentiate. Polypi projecting, or growing, in the post nasal space, may be engaged from the nose with a snare, assisted by the finger in the naso-pharynx, but, as a rule, they are best removed by forceps introduced from the mouth. In very rare instances is it ever necessary to split the soft palate, and then only for very large fibro-myoma. A patient who is subject to nasal polypi should consult a rhinologist, at intervals, so that any budding growth may be attacked early, even before symptoms are manifested.

(2) *Obstruction in which both sides are concerned.*

In some cases both the septum and the outer wall of the nasal fossa are at fault. When they are in contact ulcerations and adhesions, synechiæ, occur. These conditions are fully considered under the other divisions of this article

(1) *Obstruction due to Foreign bodies—Rhinoliths.*

It is not uncommon to find children with obstruction in one nostril, associated with a unilateral foul nasal discharge. In the majority of

these cases, some foreign body has been introduced while at play, and forgotten. I saw a case recently, presenting the above history, where a piece of cork had remained in a child's nostril for four, or five months. Removal with forceps is usually easy, though crushing the mass is sometimes necessary before it can be removed. General anæsthesia is desirable, in children, owing to the fright caused by any instrumental manipulations. An alkaline spray, or mildly antiseptic ointment, is all that is necessary. Should there be ulceration, synechia must be prevented if possible.

III. OBSTRUCTION DUE TO CAUSES SITUATED IN THE NASO-PHARYNX.

(a) Congenital occlusion is very rare. It will, when present, prevent the good results from removal of adenoids.

(b) Titroma benign neoplasms.

(c) Adherence of the soft palate to the posterior wall of the pharynx.

These cases are not uncommon. Syphilis and caustic applications are the usual causes. A case occurring in my practice is somewhat typical. A. D. age 45 consulted me for inability to breathe through his nose. He had, when a child, a very severe attack of what was called black diphtheria. For this he had repeated applications of caustic (probably nitrate of silver). Since this he has never been able to breathe through his nose. Nothing abnormal could be seen by anterior rhinoscopy, but, on inspecting the pharynx, the soft palate was seen to be adherent to the posterior wall of the pharynx. A very small opening, however, existed, leading into the naso-pharynx, as a weak permanganate solution, injected into his nose, could be seen trickling down through this hole.

HYPERTROPHY OF LUSKA'S TONSIL-ADENOIDS AND MORBID CONDITIONS SIMULATING ADENOIDS.

- (a) Diminutive choanæ ;
- (b) Low vault of the naso-pharynx ;
- (c) Paresis of soft palate and pharynx ;
- (d) Vomerine crest ;
- (e) Distortion of vertebral column ;
- (f) Retro-pharyngeal abscess ;
- (g) Enlargement of retro-pharyngeal lymphatic gland ;
- (h) Hypertrophy of palate, tuberosities ;
- (i) Webs and neoplasms.

With the exception of septal, or turbinal thickenings, adenoids may be considered as the most common cause of nasal obstruction, and, in children, up till puberty, with, or without, septal deviation, are practically

the almost invariable cause. Adenoids, strictly speaking, are physiological structures, which tend to atrophy at puberty. They may, or may not, be associated with enlarged faucial tonsils. Very frequently, adenoids exist with no enlargement of the tonsils; but enlarged faucial tonsils are almost invariably accompanied by adenoids. I have never seen a case of enlarged faucial tonsils in children, or young adults, without finding sufficient tissue in the naso-pharynx to require removal. My observation on this point are at variance with many good writers. It is, however, only with those cases in which there is an impediment to nasal respiration that my paper deals. The diagnosis is usually easy. In cases when the inferior meatus is quite roomy, one may, as Wishart says, make a diagnosis from the anterior nares; but I cannot say that I observe acutely enough to do this, except in a very few cases. The post-rhinal mirror usually gives us our diagnosis, if it be intelligently used by one who is constantly using the instrument. Those who use the instrument only occasionally, explore but little of the post-nasal space. Digital exploration, rendered less disagreeable by a weak cocaine spray to the nasal-pharynx, gives one a much better idea, not only of the situation of the mass, but the consistency of it, as pulpy, fibrous, etc. A rule often given is that we find adenoids in that case, where the finger passed, *gently* into the naso-pharynx, comes away tinged with blood. It is obvious in the tough, fibrous cases no such rule will hold good. Adenoids may exist in fairly large amounts, causing persistent post-nasal discharge, and deafness, with or without discharge, and yet cause very slight impairment to nasal breathing. Again, a somewhat small mass of adenoid tissue may, in cases where there is a low vault of the naso-pharynx, enlarged pharyngeal lymphatic gland, or prominence, or projection forward of the atlas, cause nasal insufficiency. I have one case of the latter, and have noticed others in the practice of Dr. Dundas Grant. Sometimes the facial expression, and excoriation of the external nares, alone, almost positively diagnose the case.

A case, showing an exception to this, occurred in a youth, sent me, by a fellow practitioner, for nasal obstruction, probably from adenoids. This facial expression was markedly like that seen in adenoid cases, and a mental diagnosis of adenoids was at once made. On examining his naso-pharynx, I was surprised to find the posterior nares entirely filled with a large hypertrophy of the posterior ends of the inferior turbinated body. In children, with even a small amount of lymphoid tissue in the naso-pharynx there may be considerable interference with nasal drainage; and, owing to the irritation caused by the retained secretions, and oedematous condition of the nasal mucous membrane ensues. This is an instance in which the cautery is frequently used, when the naso-pharynx should be treated.

The *treatment* is invariably operative.

In patients, whose constitutions are much impaired, it may be advisable to tone up the system for a time; but, if the nasal obstruction be very marked deficient aeration may be the cause of the debility, and no delay is justifiable. A mild eucalyptol ointment, used in the nose for a few days previous to the operation, enhances good results.

A great deal has been written about the anæsthetic in adenoid operations. The anæsthetist has, however, been too frequently neglected. A good anæsthetist, who has had considerable experience with anæsthetics in connection with throat work, is as invaluable to the operator as a good gag. To my mind, the ideal method, or system, is that practiced at the Central London Throat and Ear hospital, where nitrous oxide gas is administered in a sitting posture, in all cases over three years of age. There are two essentials, however, an expert and rapid operator, and a competent anæsthetist. When one realizes the number of adenoid operations done in this admirable institution, and sees, as I have seen, the entire absence of any dangerous complications, as well as the thoroughness with which the growths are removed, he wonders that any other anæsthetic is ever used. I examined nearly all the adenoid cases that were operated on at this institution within a week, or two, following the operation; and, in but very rare instances, would there be otherwise than a complete removal, and an excellent result. Outside of some of the larger cities in Canada, and only occasionally in them, gas is the exception. I think chloroform and the A C E. mixture are usually chosen. Ether tends to cause more hæmorrhage, or post operative-œdema of the lungs. Chloroform anæsthesia should not be so deep that the laryngeal reflex is lost, lest blood, or adenoid tissue, get into the larynx, as, the sensation being lost, they may not be coughed up. The position of the patient varies. Some prefer to operate with the head hanging over the table, others with the patient on his side. I prefer the patient on his right side, the left knee well-drawn up, the right arm behind, the patient, at the moment of the operation, being on his right breast, and face on the right side. Some authorities advocate removing adenoids without any anæsthetic whatever. If these operators do the operation thoroughly, it must cause a great deal of unnecessary suffering; and greatly increases the shock of the operation, which is sometimes, even with an anæsthetic, alarming. Cocaine 15 per cent may be used to deaden the pain of the first sweep of the curette, but my experience with cocaine is very unsatisfactory, so far as complete removal of growth is concerned.

The instruments consist of forceps and curettes of various kinds. In quite young children, and in those where the mass is quite soft, one may

remove all with the finger nail. The instruments I am in the habit of using are Golding Bird's curette and Jurac's forceps, modified by Jakins. The growths are accurately located by palpation; and, in most instances, the forceps are used to remove the larger amount. Forceps, must, however, not be abused, as one may easily take away the posterior edge of the septum, which the experienced operator readily notes, before any damage ensues. At any rate, it is questionable as to the harm done in such a case; but it is not good surgery. Injury to the eustachian tube, or soft palate, is not infrequent with an inexperienced and nervous operator. Two or three insertions of the forceps are usually sufficient, and the operation is completed by the curette and finger nail. The curettes sold as Gottstein's are, in most cases, curved in such a manner that only part of the pharyngeal wall is swept, and the operation is incomplete. In cases, complicated by projection forward of the atlas, Gottstein's curette is simply useless. Here Golding Bird's instrument, and Quinlan's forceps alone are of any use. In any case, the part must be vigorously attacked, and care taken to curette most thoroughly that part which, from the preliminary digital examination, you know has the larger portion of the mass. The faucial tonsils, if enlarged, are removed first. During the operation in the post nasal space, the anaesthetist may greatly assist the surgeon by steadying the head and securing the gag. Haemorrhage is usually very free, but, if the operator be rapid in his work, he may disregard it; still it is an excellent plan to scoop the blood from the laryngo-pharynx, or have sponge holders at hand for this purpose. After removing the curette, the patient is rapidly turned over on his chest, the face hanging over the edge of the table, the naso-pharynx being thoroughly palpated, and any remaining growths removed with the finger nail. The more complete the operation, the shorter will be the bleeding. The blood, unavoidably swallowed during the operation, is usually vomited shortly after. I have omitted any mention of the hot or cold snare, as I consider the former dangerous, and the latter never sufficient.

The following complications occasionally occur after the operation.

(1) Severe haemorrhage, which may even be excessive at the time of the operation causing death in a few instances. The treatment is on general surgical principles.

(2) Occasionally patients complain of a slight ear ache, for a few minutes, following the operation. Acute otitis media occurs at times, but is probably only found in cases that have had the nose douched out for a few days following the operation.

(3) Injury to the eustachian tubes and soft palate should not occur in a properly performed operation.

(4) Blood and adenoid tissue may get into the larynx, necessitating immediate tracheotomy.

(5) Death from shock with cocaine anaesthesia has occurred. Sanford and Mayo Collier report a case each. (Price Brown).

(6) Enlargement of the retro-pharyngeal lymphatic gland.

(7) Retro-pharyngeal abscess may occur, though few such cases have been recorded as attributable to the adenoid operation. The treatment is obvious.

(8) Secondary haemorrhage, an exceedingly rare occurrence, may come on as late as 7 or 8 days. Immediate plugging with gauze, soaked in adrenalin solution and, if necessary, transfusion should be resorted to. I recently lost a case of secondary haemorrhage, occurring on the 4th day after the operation.

The question of recurrence of adenoids after thorough operation is but briefly considered by most authors. Strictly speaking, according to Wingrave, this lymphoid tissue, being embryonic, true recurrence is impossible, yet there are cases in which, after a thorough operation, there reappears a mass, similar in macroscopical appearance to adenoids, and producing the same symptoms. Lennox Browne, Develan, and Meyer have each reported cases where, after completely clearing the naso-pharynx, there appeared, some years later, adenoid-like masses. In a thoroughly performed operation, however, recurrence is very rare.

In after treatment, rest in bed, for four or five days following the operation, is essential to good results. Lennox Browne does not consider internal medication necessary in the after treatment. A mild antiseptic oil spray is very agreeable to the patient. Douching should never be performed before the fifth day, owing to the danger of infecting the tympanum. Careful inspection of the post-nasal space should be made within the first week, when any small tags, or webs, may be easily removed. Very frequently the removal of the larger portion of the mass results in the atrophy of the remainder. This may account for the good results seen in poorly performed operations.

As the operation is done for nasal obstruction, it is frequently the case that cleaning the naso-pharynx is a preliminary to attaining our object. Nasal breathing does not always follow a thorough operation. Those who have never had nasal respiration must be taught it. After the first few days, when the nose is clear of blood, should free and easy nasal respiration not be obtained, and we are satisfied the passage is clear, we must educate the nose, so to speak, to its work. Closing the mouth tightly and making the child inhale air through the nose may be the only way to show him he can breathe through it. The frequent use

of a handkerchief and attempting to blow a candle flame out, with the mouth closed, are valuable assistants. At night, however, some support must be given the lower jaw, so that the mouth will remain closed, and nasal respiration kept up. This supporting bandage may have to be persisted in for some time. The best performed adenoid operation may be an entire failure, from a respiratory point of view, by disregarding this part of the after treatment. General iron tonics are indicated in all debilitated cases.

To thoroughly appreciate the technique of an adenoid operation, as well as to become expert in its performance, is to be obtained only by operating on a large number, and not by reading test works, or watching over the shoulder of someone else doing the work. To discuss the morbid conditions, simulating adenoid, would make the paper altogether too lengthy. They are very ably recited in the *Journal of Laryngology*, September, 1891, by Wm. Wyatt Wingrave.

Nasal obstruction in which there are no objective reasons for such.—Not infrequently in young adults, we meet with a case in which, after removal of all impediments to nasal respiration, the patient insists he has nasal obstruction. I think Dundas Grant has applied the term "fixed idea" to these cases. Sometimes patients, with perfectly clear nostrils, insist that they have nasal obstruction. These cases probably do not *feel* the air pass in the nose, hence they state it does not.

I recently saw another rare and interesting cause of obstruction in a case of congenital sporadic cretinism, in which the naso-pharynx contained a mass of adenoids, apparently sufficient to account for the nasal insufficiency. After removal of the lymphoid tissue, nasal breathing was not as free as one would wish, owing, I think, to the extreme thickness of the soft palate, noted at the time of the operation, and the low vault of the pharynx.

CURRENT MEDICAL LITERATURE.

Conducted by A. J. MacKENZIE, B.A., M.B.

TUBERCULOSIS OF THE TESTICLE.

THE Journal of the American Medical Association for June 21st has a discussion of this subject by Orville Horwitz, M.D., of Philadelphia, in which an analysis is made of 96 cases operated on. From a study of these cases he concludes that heredity has but little influence, while other diseases or traumatism is frequently found to have had a predisposing influence. The author sums up as follows :—

1. A primary tubercular infection of either the epididymis or testicle may occur, the former being by far the more common.

2. A primary infection of the epididymis, secondarily that of the testicle, is more common than the descending one.

3. Primary involvement of either the epididymis or testicle usually takes place through the circulation, the soil being predisposed to the location of the tubercle bacillus either by a slight traumatism or by some infective condition which has given rise to inflammation of the organ, most commonly an attack of gonorrhœa.

4. Secondary tubercular involvement of the epididymis or testicle sometimes follows a primary focus of the disease in other portions of the body, more commonly in those organs that are in a direct anatomic connection with the sexual glands, such as the seminal vesicles, prostate, urethra, bladder, ureter or kidney.

5. The invasion of the testicle may be rapid, associated with acute inflammatory symptoms, an abscess soon developing; or the onset may be slow, the symptoms simulating those of either chronic syphilitic orchitis, or malignant disease of the organ.

6. The tuberculin test should always be employed in doubtful cases where only one focus of the disease is known to exist.

7. In doubtful cases associated with hydrocele, the fluid should be examined for the tubercle bacilli and inoculating experiments made.

8. The injections of either emulsions of iodoforn or of sulphate of zinc into the diseased part are not to be recommended.

9. In all cases of encapsulated caseous nodules quiescent in the epididymis, epididymectomy should be performed.

10. Epididymectomy together with resection of the vas deferens is not attended by either atrophy of the testicle or sexual weakness.

11. That drainage and tubercular abscesses followed by the use of the curette is only to be employed where radical treatment is not permissible, as it is attended with more or less danger and is generally unsatisfactory in its results.

12. In instances where the epididymis alone is involved, a resection of the diseased structure is all that is required; whether a partial or complete resection of the vas deferens is to be undertaken is still undetermined.

13. Double orchidectomy should be performed when both glands are diseased, provided there is not extensive co existing tubercular infection of other organs.

14. Whether infected seminal vesicles should always be removed at the time that the epididymis or testicle is resected is a question open for discussion. From the fact that in a large majority of cases the removal of the primary seat of the disease is followed by a subsidence of the tubercular involvement of the vesicles, it is deemed wiser, as a rule, to wait and remove the vesicles later, if necessary.

15. Hygienic and climatic influences play as important parts after operations in fortifying the constitution against further invasion as they do in other tubercular conditions.

16. The anti-tubercular remedies are of great value in controlling the disease and should always be employed in conjunction with whatever surgical procedure may be deemed necessary

THE ETIOLOGICAL SIGNIFICANCE OF THE ACID-RESISTING GROUP OF BACTERIA.

THE Bulletin of the University of Pennsylvania for June in an article on this subject, gives the results obtained by an investigation conducted in the Laboratory of Hygiene of the University of Pennsylvania, between October, 1901, and June, 1902, by A. C. Abbot, M.D., and N. Gildersleeve, M.D.

It has been known for a number of years that bacteria are occasionally encountered, which, in morphology and staining reactions are so like the bacillus tuberculosis as to be mistaken for that organism in microscopic methods of study. These are widely distributed in nature, are capable of artificial cultivation and in the course of their growth in the tissues of animals they cause lesions in many ways suggestive of those of true tuberculosis. As is well known the distinction of the bacillus tuberculosis rests on its power of resisting decolorization

by an acid e.g. 3 per cent. hydrochloric acid and alcohol, and these other forms share this peculiarity, so that the ordinary test will not serve for their differentiation. This is true for the acid decolorizers ordinarily used but the real bacillus tuberculosis is the only one that in the experience of the investigators will resist the action of 25 per cent. aqueous solution of nitric acid—the original decolorizer used in the Koch-Ehrlich process. In process of growth these spurious forms develop often in much less time than the true, while the character of their growth is quite distinct but yet differs more in degree than in kind.

The effect of these forms on animals after injection, differs considerably, in many cases no effect is apparent in others inflammatory and purulent aggregations of tissue are found. In the experiments made in this investigation three forms were used the " Butter Bacillus " " Grass Bacillus II." and " Timothy Hay Bacillus " and experiments were made upon small animals—rabbits—and upon larger domestic animals—calves and hogs, forty-five rabbits, four hogs, and fifteen calves, in all being used. A series of experiments was also made, to determine the frequency of such micro-organisms in dairy butter, fifty samples being taken and tested by subcutaneous or peritoneal injection in guinea pigs. Space forbids a complete analysis of the results obtained but the conclusions derived are summarised as follows.—

(1) Some of the acid-resisting bacteria are capable of causing in rabbits and guinea-pigs nodular lesions suggestive of tubercles; that these lesions, while very often like tubercles in their histological structure, may nevertheless usually be distinguished from them by the following peculiarities:

(a) When occurring as a result of intravenous inoculation, they are always seen in the kidneys, only occasionally in the lungs, and practically not at all in other organs.

(b) They constitute a localised lesion having no tendency to dissemination, metastasis, or progressive destruction of tissue by caseation.

(c) They tend to terminate in suppuration or organization rather than in progressive caseation, as is the case with true tubercles.

(d) They are more commonly and conspicuously marked by the actinomyces type of development of the organisms than is the case with true tubercles, and these actinomyces are less resistant to decolorization by strong acid solutions than are those occasionally seen in tubercles.

(3) That by subcutaneous, intravenous and intrapulmonary inoculation of hogs and calves, the typical members of the acid-resisting group are incapable of causing lesions in any way suggestive of those

resulting from similar inoculations of the same animals with true tubercle bacilli.

(4) That though occasionally present in dairy products, they are to be regarded as of no significance, etiologically speaking; but may be considered as accidental contaminations from the surroundings and not as evidence of disease in the animals.

SERVICE OF INTERNES.

THE "Gazette des Hopitaux" for May 29th, is a special number devoted to the recent centenary celebration of the founding of the "Internat. de Médecine et Chirurgie" or service of Interne in the Paris Hospitals in 1802. Appointments to the Interne service are made by competitive examination, the number which in 1802 was twelve is now over seventy, they are keenly competed for by many of the 3,600 medical students in Paris, are tenable for four years, and each interne has the liberty of choosing the chief under whom he will serve. Among the famous names of past internes are Magendie, Claude Bernard, Baillon, Beyeron, Littré &c. In the court of honor in the "Hôtel Dieu" a memorial was erected in the form of a bas-relief representation of an operation for tracheotomy in memory of the internes who had sacrificed their lives in the discharge of their duties.

THE PROPHYLAXIS OF INFECTIOUS DISEASES.

PEDIATRICS June 14th, in an article by John Rübrah deals with the possibility of prophylaxis by means of antiseptics without isolation in different rooms. The combination of antiseptics and isolation suggested by Mr. Grancher and used by him with success for some years in the "Hôpital des Enfants Malades, is as follows:

The first care was the suppression of dust. To do this the floors are paraffined and are washed twice daily with a solution of sublimate. The walls are painted and washed twice a week with sublimate solution.

The second care is the isolation of the patient. In order to accomplish this a metal screen 1.25 meters high surrounds the bed. One end is left open so that it may be entered. On entering the screen both physicians and nurses are gowned, and on leaving, the hands are disinfected by washing with soap and brush and the using of a 1-1000 solution of sublimate; the gowns for each patient are hung on the screens of the respective beds. All mattresses and bedding are sterilized by steam,

and all the linen and articles used for feeding are boiled in water. The food is served on wire trays having a handle. On these trays are placed the bowl and saucer, knife, fork, spoon and napkin. After feeding the whole is placed in a pot of water with a little carbonate of soda and boiled for five minutes. This gives a temperature of 103° C. The beds are of iron and are disinfected by scrubbing with an acid solution of sublimate and a brush.

The results of this means of caring for contagious cases may be briefly summarized as follows :

Measles. During 1885, 1886 and 1887 there was an average of 36 cases of measles developing in the wards. During the decade following under the special precautions the annual average has been 11. Without giving the detailed figures it may be stated that the coefficient of infection for measles where special precautions were taken was 0.01. For the other wards of the hospital it was 0.02 or 0.03. The decrease of infections with the special precautions was about 3 to 1.

Varicella. This disease, with about the same contagiousness as measles, shows about the same result.

Diphtheria. Here the results are very remarkable. Previous to the careful work of isolation and antiseptics there was an average of 12 infections in each of two wards per year. Afterwards, during the next ten years, in one ward there was not a single case of infection and in the other ward there were only 6 cases, 5 of which were imported by visitors. In other words, infection from the cases of diphtheria was practically done away with. It must be understood that there were cases in the ward during these ten years but they came in either as developed cases or during the stage of incubation.

Scarlatina. In four ordinary wards during ten years there were 99 cases of scarlet fever. In the two wards where the experiments were tried there were only seven; three of these were importations. Scarlet fever infection was therefore practically controlled.

Whooping Cough, Mumps and Bronchopneumonia. All three of these were practically entirely suppressed.

Notwithstanding the undoubted success obtained by this method, the difficulties it presents and the great dependence placed on the care of attendants renders it inferior to isolation in separate buildings when that is practicable.

THE FUNCTIONS OF THE EPIGLOTTIS.

IN *The British Medical Journal* of July 19th, Knowles Renshaw, Pathologist to the Manchester Consumption and Throat Hospital discusses the Functions of the Epiglottis. The classical theory is that

described by Foster and the older physiologists that its use is to close the opening of the larynx during the process of swallowing, being depressed over the larynx and the cushion at its base covering the *runa glottidis*. The reasons for disputing this explanation are (1) The muscles attached to the epiglottis, consisting of a few fibres of the *aryteno-epiglottideus* and part of the *thyro-arytenoideus externus*, are very weak and do not seem capable of bending the cartilage transversely; their function would appear rather to be to draw back the two lateral margins of the epiglottis and to make the *ary-epiglottidean* folds tense. (2) Persons in whom the epiglottis has disappeared have little or no difficulty in swallowing either solids or liquids. (3) The shape of the epiglottis is often such as to make it improbable that it should be sent backward or that it should make an efficient lid for the larynx if it were. (4) A case of corrosive-acid poisoning has been described in which the only part of the epiglottis to be eroded was the laryngeal surface of the *petiolus*—a position which should have been completely protected by a depressed epiglottis.

In 1892 Prof. Stuart suggested a more satisfactory explanation, to the effect that the epiglottis did not fold down in a lid-like way, but that the occlusion of the lower air-passages during deglutition depended entirely on the arytenoids which were approximated and moved forward, thus coming in contact with one another, and with the base of the epiglottis. The closing of the laryngeal entrance was at the same time assisted by the upward and forward movement of the entire larynx.

With this explanation the writer agrees so far as it goes, but believes that it is defective in that it does not account for the function of the epiglottis, which is too important an organ, and too constant in size and shape to be functionless. He found that notwithstanding the difficulty attaching to the use of the laryngoscopic mirror during swallowing, yet some cases evinced such tolerance that fairly satisfactory observation could be made. The position of the epiglottis was closely pressed against the back of the tongue, while the arytenoids were drawn upward and forward toward its base, and the whole larynx lifted upward and somewhat forward, thus opening the mouth of the *oesophagus*.

By the process of exclusion the writer concludes that the function of the epiglottis is the prevention of the trickling of the buccal and pharyngeal secretions downward into the larynx, and deflecting them laterally into the pyriform sinuses, whence they reach the *oesophagus*. In support of this it is urged that persons who have lost the epiglottis are troubled constantly with huskiness and desire to clear the throat. Its value in phonation is so far an unknown quantity.

THE TREATMENT OF INCIPIENT BRONCHO-PNEUMONIA IN INFANTS.

IN THE LANCET, June 20th, Theodore Zaugg, M.D., of Zurich, discusses the use of hydro-therapeutic measures in the treatment of incipient infantile broncho-pneumonia. The seriousness of this affection, and its occurrence as a fatal termination to whooping-cough and measles are noted; the writer's series of 120 cases of the former and 150 cases of the latter disease treated in this way present no mortalities.

At the outset of pneumonic symptoms (high temperature, diminished resonance, rales, increased respiration rate, etc.), a bath of 86°F. for two minutes, reducing the temperature to 76° by the addition of cold water, is given. The body is rubbed with the hand or a sponge, and if the child is feeble only a part of the body is immersed. If pneumonia is definitely established the bath may have to be repeated at intervals of from 8 to 24 hours. The "cross-packs" ("Kreuzburden") are used for bronchitis, and are applied as follows: A linen bandage 1½ inches wide for infants or 5 inches for adults and from 2 to 3 yards long is dipped in cold water (from 54° to 66°) and applied to the chest, passing from right axilla over left shoulder and back transversely across, then from left axilla to right shoulder. This is covered in turn with a flannel bandage, and the whole left in situ over night.

The writer believes this method of treatment is superior to chest packs and that with careful and intelligent use will be found as valuable in relieving symptoms and producing comfort as the baths have been found in typhoid. The value does not rest alone in the reduction of temperature but, by filling the capillaries of the skin, it relieves the internal congestion and indirectly stimulates the heart and great nerve centres.

Drug treatment may be used in conjunction though the writer has found even in severe cases that this form of management meets all indications.

DISEASES OF THE EYE, EAR, NOSE, AND THROAT.

Conducted by PERRY G. GOLDSMITH, M.D., Belleville,
Fellow of the British Laryngological Rhinological, and Otolological Society.

THE TREATMENT OF ACUTE EARACHE IN YOUNG CHILDREN.

AT the June meeting of the American Medical Association Geo. L. Richards read a paper on this topic. He strongly advocates paracentesis if there be any noticeable bulging of the membrana tympani. During the first stage, before any marked exudation has taken place into the tympanum, he advises glycerogelatin bougies made up as follows:

℞ Acid Carbolie, ℥ 7.
Fl. Ext. Opium, ℥ 6.
Cocaine, grs. 6.
Atropia Sulph., grs. 3.
Water, ℥ 52.
Gelatine, grs. 18.
Glycerine, grs. 158.

To make 47 bougies.

The bougies should be kept in lycopodium powder or wrapped in tinfoil and moistened with water before being put into the ear.

The writer uses glycerine acid carbol. dil. in these cases, to which is occasionally added a small amount of absolute alcohol, but is quite free to admit the addition of the other ingredients would be of material advantage. Not infrequently repeated attacks of earache in children are caused by acute adenoiditis. Removal of the adenoid is then the only rational procedure to prevent recurrence of the aural mischief. On the other hand, if the earache be reflex from decayed teeth these should be attended to at once. Moreover, if the glycerine and carbolie mixture be used, and paracentesis be ultimately demanded, the mixture will have sterilized the canal and go a long way in preventing the exudation from becoming purulent if it be not already septic, as well as shortening the inflammatory process within the tympanum by preventing re-infection from the external auditory canal.

CASE OF DIPHThERIA :—INTUBATION IN EXTREMIS : RECOVERY.

WABURY in July *Pediatrics* cites a very interesting case, showing the difficulty that exists in the very latest stages of differentiating a death from exhaustion and one from suffocation. A child seven

years of age, ill with diphtheria for four days, had very great difficulty in breathing. It was thought that death was only a matter of minutes, as the only effort at respiration was an occasional gasp such as is seen in people who are dying. Without much hope, intubation was at once performed and strychnine 1-14 gr. administered hypodermically. The child rallied promptly and was given anti-toxine—3000 units, a small dose of which had been given previously. Recovery was uneventful.

THE USE OF CARBOLIC ACID IN ULCERS OF THE CORNEA.

THEOBALD, of Johns Hopkins, in the June number of the *American Journal of Medical Sciences*, speaks very highly of cauterization of ulcers of the cornea with carbolic acid. He prefers it generally to the actual cautery as being safer and less liable to leave opacities. His method is to apply the acid with a wisp of cotton on a wooden toothpick, allowing it to remain momentarily, when it is washed off with saline solution or a solution of boracic acid. No mention is made of fluorescine for staining the ulcer whereby the acid may be placed on the denuded portion of the cornea alone. Not infrequently it is absolutely necessary in virulent ulcers of the cornea that the cauterizing agent be placed under the small necrotic flap that so frequently surrounds the edges of the ulcer and under which the ulcer spreads. A camel's hair brush does this very nicely. It is not without danger to flush the excess of acid from the ulcer with any solution. A better plan, the writer thinks, is to apply the acid with a small camel's hair brush and carefully remove the excess with fine strips of clean blotting paper and subsequently using airoil or iodoform ointment.

THE REMOVAL OF FOREIGN BODIES FROM THE EAR.

TODD, in the *American Journal of Surgery and Gynecology*, has a very practical article on this subject. Attention is drawn to the fact that most foreign bodies, *if left alone*, would do no special harm, for a time at any rate, but unskilled efforts to remove them may, (1) injure the lining of the canal; (2) perforate the drum-head; (3) force the foreign body through the membrane, giving rise to all the dangers and sufferings of acute otitis media, even if not mastoiditis and other sequelae of that grave condition. A very good rule is given, viz:—"If it is impossible to remove the foreign body by the intelligent use of the syringe, it is better for the average practitioner to cease in his attempts." The importance of a careful inspection of the meatus, with a forehead

mirror and speculum, is insisted upon, in order that one may be sure there is a foreign body, and also its nature if possible. Unless the object is *very easily* removed with a hook or scoop, or consists of a substance which will swell on contact with water, as a pea or bean, the syringe ought, in every ones hands, be used persistantly at first. The canal being straightened by pulling the auricle upward and backward (in young children the traction must be downward), a small stream of water should be directed against the upper wall of the canal, in order that it may pass above the foreign body and wash it out below. Failing in this manner, the stream should be directed below. In case the object is an insect, hydrogen peroxide, or alcohol, may be used to hasten its death (chloroform vapor is also good). The writer next utters a note of warning against the use of instruments, unless the field of operation is quite in view, and the operator is perfectly familiar with otological work. In cases where there is considerable swelling, it is best to await its subsidence. Children should be anaesthetised for all instrumental interference. A very ingenious method of removing objects, though not by any means new, is to glue a camel's hair-brush to the foreign body; and, when it is hardened, traction of the brush may easily accomplish the desired result.

SUBMUCUS INJECTIONS OF PARAFIN IN CASES OF ATROPHIC RHINITIS.

AT the March meeting of the London Laryngological Society, Mr. Richard Lake, F.R.C.S., presented a patient, age 25, afflicted with atrophic rhinitis of many years duration. The customary crust formation responded somewhat to the usual local treatment; but the patient was dissatisfied, probably because she *felt* no air passing through the nose. This suggested to Mr. Lake the idea of contracting the nasal passages by making an artificial turbinated body by means of submucus injections of parafin. The parafin was prepared exactly like that for the external operation, explained in the June LANCET.

The injections were made under the posterior surface of the inferior turbinated body, about 5 minims each time, with intervals of one week. The relief obtained was inversely proportionate to the apparant increase in size of the turbinal. The patient was very much improved in her own estimation. In the discussion that followed, the majority of the fellows spoke very highly of the intra-nasal appearances produced.

Those who have occasion to treat many cases of atrophic rhinitis, or ozena, in which there is no accessory sinus mischief to be found, will

welcome anything that will add to their ability to mitigate the great discomfort of these patients. While this treatment does not act in concert with the usually explained pathology of this disease, Mr. Lake says "he does not feel so confident in the present pathology of atrophic rhinitis, as described in text books, to quite accept the explanations given by them as correct." This experiment is certainly very ingenious, and the outcome will be watched with a great deal of interest.

THE PRACTICAL VALUE OF NITRA-TRACHEAL MEDICATION.

P. S. DONNELLAN in the *Therapeutic Gazette* gives his experience of two years use of intra-tracheal medication in cases of chronic bronchial and pulmonary affections. The medications found most useful are creosote, menthol, guaiacol, or camphor made up in strengths of 2 or 4 per cent solutions with liquid abolene, olive oil, or Prices glycerine. The technique is the authors, the words is as follows. An anti-toxin syringe with laryngeal tip having a number of lateral openings is used. The larynx, is first anaesthetized with a 4 per cent solution of cocaine, the patient holding his tongue well forward, 2 or 3 drams of the solution are injected while the tip of the syringe is between the vocal cords, the patient at the time taking a deep breath. The writer can very heartily endorse this good procedure. He uses a Gibbs intra-tracheal syringe and has found a very marked and rapid improvement in cases of chronic larynx-tracheitis, and chronic bronchial trouble in elderly people. It has the great advantage of applying the medicine directly on the affected surface and avoids the use of many nauseating expectorant mixtures which, in order to reach the trachea must pass through the stomach and not infrequently, deranges the gastric functions. Donnellan has had some excellent results in bronchial asthma and incipient pthisis. Indeed, one is often able to detect the odor of the medicine used in the patients breath for hours following the injection.

PROVINCE OF QUEBEC NEWS.

Conducted by MALCOLM MacKAY, B.A., M.D., Montreal.

THE first meeting of the French Medical Society of North America was held in Quebec on June 25th, 26th and 27th, and considering the short time which was spent in organization was remarkably successful. The meetings were held in the buildings of the University of Laval, where some two hundred delegates assembled and discussed the papers submitted by eighty of their number. The arrangements for the accommodation and entertainment of the members were all that could be desired, and the medical profession of Quebec is to be congratulated on this portion of the work. The subjects for discussion were well chosen, and on the whole careful papers, showing wide reading, were presented. Indeed one might take exception to the amount of time spent in presenting data obtained from standard text books and well known authorities, in a new form. Not that all or nearly all the papers were of this character, but a lack of originality was too much in evidence. On the other hand the discussions were lively and to the point, and while no new scientific fact was demonstrated, yet each speaker, in referring to his own personal experience, shed a new light on the subject of debate.

The next meeting is to be at Montreal in 1905 under the direction of the following officers :

Président, le Dr. Foucher, de Montreal ; 1er vice-président, le Dr. Ahern, Québec ; 2e vice-président, le Dr. Petit, de Nashua, N H. ; 3e vice-président, le Dr. Rouleau, Calgary, T.N.O. ; Secrétaire-général, le Dr. Lesage, Montréal ; Secrétaire-général, division de Québec, le Dr. Art. Simard, Québec ; Trésorier général, le Dr. Boucher, Montreal ; Trésorier général, division de Quebec, le Dr. Marois, Québec.

Some indignation has been expressed among medical men of Montreal concerning a by-law passed some time ago by the town of Westmount. This bill states in general that a medical man attending a case of confinement within the town limits is responsible for the registration of the birth of the child, and in case of neglect is liable to a fine or imprisonment. At the last meeting of the Montreal Medical Society Dr. Elder brought up this bill for discussion, emphasizing in his speech the injustice of adding such a burden to the already overworked medical practitioner. He hoped to have an expression of opinion from the Society to forward to the town council, that the members might realize that the

by-law was considered by the majority of the medical men to be an imposition. During the discussion Dr. Girdwood stated that it was the greatest medical legal absurdity that he had seen for fifteen years. In the first place the registration card showed that the physician had to *name* the child, secondly say who the *father* was, together with his occupation, etc. The first was indeed a difficult and dangerous task, but the second would tax the ingenuity of the town council itself, and there were but forty days in which to accomplish the whole affair. He thought that the thing was absurd, and hoped that an emphatic statement of these views would be forwarded to the authorities. Several members of the Society who had been summoned and fined for neglecting to comply with the by-law spoke in the same strain, and after further discussion a resolution was drawn up and forwarded to the council, to the effect that the Medical Society of Montreal thought that the new by-law imposed an unnecessary and grievous burden upon the medical profession.

A CASE of considerable interest has recently been reported at the Royal Victoria Hospital. The patient, a woman aet. 26, was admitted on March 22nd complaining of diarrhœa, cough and great weakness. She dated the onset of her trouble back to her last confinement, which occurred three weeks previous to her admission to the hospital. The birth was normal, although the patient states that she lost a large quantity of blood. After the child was born the mother had chilly feelings alternating with hot sweats, and the temperature varied from 100° to 102°. Vomiting and diarrhœa, which had been present for three months, became very severe after delivery.

The personal and family history contained little of importance. She had been married three years and had one other child who died two weeks after birth, no history of miscarriages, and no history of syphilis. On admission the patient had T. 100 4-5, P. 134, R. 32. She was a fairly well developed woman with poor musculature but subcutaneous fat was in good quantity. The skin all over the body was of an earthy yellow hue, with patches of dirty brown pigmentation on the face and trunk. The lower extremities and back were markedly oedematous, and the mucous membranes very pale. The hair had fallen out in large patches and the scalp was dry.

The cervical, axillary, and epitrochlear glands were palpable, being small and hard.

The pulse was of small volume, low tension, rapid, and at times irregular. The cardiac dulness extended about one inch beyond the

nipple line, and there was a distinct thrill felt at the apex, presystolic in time.

Auscultation showed a galloping rhythm with reduplication of the first sound at the apex. At the base a soft systolic murmur was heard over the pulmonary cartilage and the aortic second sound was sharp.

Examination of the blood gave, red cells, 930,000, white cells, 6,000, haemoglobin, 15 per cent. (Dare's). Poikilocytosis was marked, megalocytes, microcytes and megaloblasts were present, and the pigmentation of the red cells varied from deep red to a pale, salmon colour. Several of the normoblasts had a divided nucleus.

The lungs showed diminished resonance all over left side behind, with some small moist rales.

The knee jerks were very much diminished, and the patient complained of numbness of the hands and feet. An examination of the eyes showed a well marked hæmorrhagic retinitis. The urine was dark coloured, specific gravity 1015. Albumen $\frac{1}{2}$ gramme per litre, no sugar, a few hyaline casts, no blood. The genitalia were normal.

The patient was put on liquid diet and dialysed iron. The vomiting and diarrhœa ceased and the temperature gradually fell until April 14th when the iron was changed to liquor arsenicalis m. iii T.i.d. Within three days the vomiting returned and the arsenic had to be discontinued. At this time the red cells were 916,666, white cells 5,400, haemoglobin 20 per cent. and the blood slides showed the same condition as before. On April 22nd the red cells numbered 520,000 per c.m.m. and the haemoglobin was 13 per cent. From this time the patient rapidly improved and on May 9th the erythrocytes numbered 2,000,000, haemoglobin 38 per cent. On May 16th she suddenly developed intense dyspnoea, T. 100 2-5, P. 128, R. 40. The lungs showed numerous moist rales throughout, and the albumin increased to three grammes per litre. By the end of May the pulmonary signs had practically disappeared, the haemoglobin was 52 per cent., erythrocytes 2,640,000. The patient gradually regained strength and was discharged on June 30th with erythrocytes 4,310,000, haemoglobin 52 per cent. There were no nucleated red cells found in the slides, and the poikilocytosis was very slight.

MARITIME TOPICS AND NEWS.

Conducted by W. D. FORREST, M.D., Can., L.R. C.P. Lond., M. R. C. S. Eng., B.Sc. Halifax.

MARITIME MEDICAL ASSOCIATION.

THE twelfth annual meeting was held in the Legislative Council Chambers, Charlottetown, on July 9th, and 10th, Dr. F. P. Taylor, the president of the association took the chair at 10.30 a. m., and called the meeting to order. After the reading of the minutes of the last meeting and the reception of delegates from sister societies, Dr. Taylor delivered his presidential address. In this he dealt with the different phases of medical education and pointed out the importance of a good preliminary training before entering upon the medical course Dr. Taylor thought the sooner a degree in arts is made compulsory the better.

Dr. Geikie, dean of the medical faculty of Trinity College, followed with a very interesting paper on "simplicity in medical treatment." He took pneumonia as the disease by which he illustrated his remarks. Bleeding in pneumonia was discussed and the kind of case, time of bleeding etc., were considered at length.

The address was practical throughout and was much appreciated by those who listened to it.

Dr. Van Wart, of Fredericton, then read his paper on "a plea for the surgical treatment of appendicitis."

A discussion followed this and the consensus of opinion seemed to be in favour of early surgical interference in such cases. Special mention was made to the attack through which our sovereign has recently passed.

The afternoon session opened with a talk on "Health, and how to save it" by Dr. McNeil, of Charlottetown. The paper abounded in many practical and useful suggestions which those, who would live long and be happy, might do well to follow. Dr. Houston, of Souris, reported a case of osteo-myelitis, which had occurred in his practice. He laid stress on the importance of diagnosing the condition early.

The meeting then adjourned to the grounds of government house, where the rest of the afternoon was very pleasantly spent eating ice cream and strawberries.

At the evening session Dr. H. D. Hamilton, of Montreal, referred to some laryngeal cases that came under his care. His remarks were well illustrated by charts. Dr. Stoddard, of Pueblo, Col., read a paper on

"some of the mistakes of surgical Gynaecology." This was a plea for conservatism in diseases common to women. He referred to the eagerness on the part of some to operate on all or nearly all of these cases. Medical treatment in many of these is all that is necessary, and at least should be given a trial. Dr. Dewitt reported a case of "Tumor of the mediastinum," and Dr. MacLaren gave notes on some cases of "Pyelitis in children." Then followed a general discussion on "Cancer" which was participated in by many.

At the Thursday morning session Dr. Weaver, of Halifax, discussed the therapeutics of the x-rays. Then came the report on a case of "Rupture of the uterus" by Dr. Fraser, of St. John's, Newfoundland. The patient was operated on and the uterus removed. The operation was performed in a small country shanty, some miles from St. John's, and, although under the most adverse circumstances, the patient recovered and made a speedy convalescence. Dr. Fraser was warmly congratulated.

On the afternoon of this day members were treated to a drive around the suburbs. The weather was delightful and the scenery was much enjoyed. At six o'clock they found themselves at a Sunday school picnic at which a special table was prepared for them. After justice was done to the dainties provided, the party returned to town, all feeling satisfied that their are worse forms of entertainment than Sunday school picnics.

In the evening the members were the guests at a "Smoker," given by the officers of the 4th regiment Canadian Artillery. Here the night passed pleasantly and everyone was made to feel at home. This by some was pronounced the most successful part of the whole programme. Everybody was pleased, everybody was happy, and no one, when he left the building, could have asked for anything *more*.

The next meeting of the association will be held in St. John. The officers for the ensuing year are: President, Murray MacLaren, St. John; Vice-President for P. E. I., P. C. Murphy, Tignish; Vice-President for N. S., G. M. Campbell, Halifax; Vice-President for N. B., R. Botsford, Moncton; Secretary, T. D. Walker, St. John; Treasurer, C. A. McPhail, Summerside.

The number enrolled at the Charlottetown meeting was 73.

NOVA SCOTIA HOSPITAL.

THE graduating exercises of the Training School for Nurses in connection with the Nova Scotia Hospital took place on the afternoon of July 24th. Lieut.-Governor Jones occupied the chair. Dr. Hattie,

the Superintendent of the Hospital, gave a history of the training school and an account of the work it was doing. The Governor then made a few remarks and presented the diplomas and prizes to the young ladies and gentlemen, who had successfully completed the course. Speeches were made by Admiral Douglas, the commander of the British North American fleet; General Parsons, the commander of His Majesty's troops in Canada; Rev. Father Underwood and Dr. B. Russell, M.P. Dr. Chisholm addressed the graduating class, giving them some sound, practical advice. After this the visitors inspected the hospital and grounds. Every one went away feeling that Dr. Hattie and his staff are sparing no pains to make the lot of this unfortunate class of patients as bright and cheerful as possible.

NEW BRUNSWICK MEDICAL ASSOCIATION.

THE twenty-second annual meeting of this association was held in St. John on July 15th. Papers were read and topics of general interest to the profession discussed. The attendance was large and everything passed off well. The following is a list of officers appointed for the ensuing year: President, G. A. Addy, M.D.; Vice-President, J. D. Lawson, M.D.; Second Vice President, A. Meyers, M.D.; Treasurer, G. C. Melvin, M.D.; Secretary, Clara Olding, M.D.

PRINCE EDWARD ISLAND MEDICAL SOCIETY.

THE annual meeting of this society was held at Charlottetown on the morning of July 9th. Business affecting the society was attended to, after which the meeting adjourned in order that the members might attend the meetings of the Maritime Association. Dr. F. F. Kelly, of Charlottetown, was elected president, and Drs. Conroy and Shaw, secretary and treasurer respectively for the ensuing year.

UNIVERSITIES AND COLLEGES.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.

THIS is the name adopted by the medical profession of the Province of Ontario. By an Act of the Legislature the profession was incorporated under this name. The Council of the College of Physicians and Surgeons is composed of thirty persons, elected for a period of four years. Seventeen of these are elected by the members of the profession residing in their respective districts. Eight of the members of the Council represent the following Universities or Colleges: University of Toronto, Queen's University, Victoria University, Trinity University, Toronto School of Medicine, Royal College of Physicians and Surgeons, Trinity Medical College, Western University. Five are elected to represent the Homœopathic members of the profession.

This Council has power to regulate the medical education of the Province, to admit and enrol medical students, to determine the curriculum of studies, to appoint examiners, and to define the manner of admission of those holding degrees from other Provinces or countries.

In order to register as a matriculated student the applicant must hold one of the following qualifications: A certificate that he has passed the examination conducted by the Education Department for honor matriculation in Arts, with physics and chemistry; a certificate from any University in Canada, conducting a full arts course, that he has passed the senior matriculation, or the examination at the end of the first year; and graduates in Arts in any University in His Majesty's dominions. The fee for registration is \$20; and the course of medical studies dates from that of registration.

Every student must spend five years in the actual study of his profession, excepting graduates in Arts and Sciences, who have spent two years in the study of physics, chemistry, biology and physiology. The fifth year must be devoted to clinical work in a hospital, or six months with a physician and six months in a hospital or dispensary. During this final year the student is required to take twenty-five lectures on each of the following subjects: Medical cases, surgical cases, obstetrical and gynæcological cases, and pathological work. The four winter sessions must be eight months each.

The curriculum of professional study consists of two courses of eight months in descriptive and practical anatomy of 280 lectures or demon-

strations each year; one course of 50 lectures in topographical anatomy; two courses of eight months each in physiology and histology of 120 lectures and demonstrations each year, two courses of eight months each in theoretical and practical chemistry of 150 lectures and demonstrations each year; two courses of 50 lectures in materia medica and pharmacy; two courses of 80 lectures each in the principles and practice of medicine; two courses of 80 lectures each in the principles and practice of surgery; two courses of 80 lectures each in midwifery and diseases of women; two courses of 100 lectures in clinical medicine; two courses of 80 lectures in clinical surgery; one course of 50 lectures in jurisprudence and toxicology; one course of 100 lectures in pathology and bacteriology; one course of 30 lectures in sanitary science; one course of 50 lectures in therapeutics; one course of 10 lectures in mental diseases; two courses of 20 lectures in children's diseases; a course of 5 lectures and 5 demonstrations upon the use of anæsthetics and having administered an anæsthetic 5 times; the dissection of the human body once; practical hospital work for 24 months during the first four years; and, having attended 6 cases of midwifery. Each lecture and demonstration shall be at least one hour.

The subjects for each examination: (1) Primary: anatomy, physiology and histology, practical and theoretical chemistry, materia medica and pharmacy. (2) Intermediate: Medical, surgical, and topographical anatomy, principles and practice of medicine, general pathology and bacteriology, operative and non-operative surgery, operative and non-operative midwifery, medical jurisprudence and toxicology, mental diseases, sanitary science, diseases of women and children, and therapeutics. (3) Final: Clinical medicine and surgery, diseases of women, medical and surgical diseases of children. The Primary and Intermediate Examinations are written and oral; and the Final, clinical and oral.

Homœopathic students are required to spend four sessions, of not less than six months each, in a college, approved of by the Homœopathic representatives on the Council.

The following persons are entitled to register:

(1) Those who have complied with the course of study as above given for regular, or homœopathic practitioners.

(2) Graduates in medicine from recognized medical colleges outside the Dominion of Canada must pass the matriculation required by the Council, must attend one or more full winter courses of lectures in some Ontario medical college, must complete the practical and clinical curriculum after the fourth year and pass all the examinations.

(3) British registered practitioners of five years standing from the date of registration may register on payment of all fees and passing the

Intermediate and Final examinations. Those who have not been five years in practise must pass all the professional examinations.

(4) Homœopaths who have spent four sessions of six months each in some college approved of by the homœopathic members of the Council, and have passed the matriculation and professional examinations as above laid down for homœopaths.

(5) Licentiates under the Acts of Upper Canada, 8 George IV, or under the Consolidated Statutes of Upper Canada, 2 Vict.; or under the Consolidated Statutes of Lower Canada, 10 and 11 Vict.

The following penalties may be imposed: If any person procures false registration his name shall be erased and incur, on conviction, a penalty not exceeding \$100; and any one aiding him, a fine of not less than \$20 nor more than \$50. Any one who practises, without registration, shall, on conviction, pay a fine of not less than \$25, nor more than \$100, for every offence. Any person pretending to be a practitioner, or who assumes wrongly titles, shall be liable to a fine from \$10 to \$50. Any person who is not registered, but leads the public to believe he is, shall be liable to a fine from \$25 to \$100. No person shall be entitled to recover charges unless he is registered. Any registered practitioner who may be convicted of any offence that if done in Canada would be a felony or misdemeanor, or is guilty of infamous or disgraceful conduct, in a professional respect, shall be liable to have his name erased from the register. Any person who is entitled to be registered, but who neglects to register, forfeits the rights and privileges conferred by registration, and is liable to all the penalties imposed against unqualified practitioners. The name of any practitioner who is in arrears for twelve months with his annual fee, and after two months' notice of such default, shall be erased from the register. In case the penalty and costs awarded by a justice of the peace be not forthwith paid, he may commit the offender to the common gaol for a term not exceeding one month.

The fees are as follows:—Registration of matriculation, \$20; primary examination, \$30; intermediate and final with registration, \$50; the diploma, \$5; and the annual assessment \$2.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF QUEBEC.

THIS is the qualifying body for the Province of Quebec. All registered practitioners resident in Quebec, are incorporated under the name of the College of Physicians and Surgeons of the Province of Quebec, with the usual general powers of an incorporated body. The College must maintain an office in the cities of Quebec and Montreal. Every

person who is authorized to practice medicine, surgery or midwifery, is called a member of the College of Physicians and Surgeons.

The affairs of the College of Physicians and Surgeons are managed by a board of governors, consisting of forty persons representing the profession and medical colleges, elected for a period of three years, from among those who have been at least four years in practice. In the event of a vacancy among the elected members, the board of governors fills the vacancy; in the case of an appointed member, the College or University he represented fills the vacancy. The Board of Governors of the College of Physicians and Surgeons is also known as the "Provincial Medical Board."

The Board of Governors, or the Provincial Medical Board, regulates the study of medicine, surgery, and midwifery, by determining the nature and extent of preliminary qualification, the duration of study, and the curriculum of professional studies. It examines all credentials, certificates of study, all documents, and diplomas submitted for registration, or purporting to entitle the person to a license to practise. It keeps a proper register of all persons registered. It also makes rules and regulations for the government of the corporation. The Board appoints examiners, and lays down rules for their guidance, and the subjects on which the examinations are to be held. The Board also appoints assessors, from its own members, or from the registered members of the College of Physicians and Surgeons, to attend the examinations in the universities and colleges, and to report to the Board upon the same. The Board has power to determine upon a tariff to be charged in towns and country for medical, surgical, or obstetrical advice, or attendance. This tariff must be approved by the Lieutenant-Governor in Council.

The following persons are entitled to register, and obtain a license to practice in the Province of Quebec.

(1) Any person who has attended medical lectures during three sessions in a medical school in the British possessions, and who has practised for thirty years in the Province, and furnishes a certificate from two resident practitioners that he has been successful.

(2) Those who have attended a recognized Medical School or College, three sessions of six months, during his four years of study, the first session in his first year, and the third session in his fourth year. He must furnish a certificate of study with a practitioner during the period between sessions; that he has attended a hospital, of not less than fifty beds, for three periods of six months each; and that he attended six cases of labor, and compounded medicine for six months. He must attend two courses of six months in anatomy, practical anatomy, surgery.

medicine, midwifery, chemistry, materia medica and therapeutics, physiology and pathology, clinical medicine and surgery; one course of medical jurisprudence; one course of three months on botany and hygiene; and a course of twenty-five demonstrations on microscopic anatomy, physiology and pathology. Before entering upon his medical studies, he must hold a degree in arts, science, or letters from a British or Canadian University or pass an examination on English, French, Latin, Geography, History, Arithmetic, Algebra, Geometry, Literature, Botany, Chemistry, Natural and Moral Philosophy, before the examiners appointed by the Medical Board. The professional examinations are divided into a primary on chemistry, anatomy, physiology and general pathology, hygiene and histology; and a final on materia medica and therapeutics, obstetrics and diseases of children, special pathology, jurisprudence and toxicology, medicine, surgery, bacteriology and special work on eye, ear, nose, throat and women's diseases. These shall be oral or written.

(3) Those who hold a degree in arts, science or letters, or who have passed the preliminary examination of the College of Physicians and Surgeons, and who have obtained their degree or diploma in medicine from a University in the Province, or the Royal College of Physicians and Surgeons of London, are admitted to registration and receive the license to practise.

(4) The Board has power to admit to registration those who are registered in Great Britain, or who hold diploma after a four years course in a British or Colonial University, or Medical College, or those of France, provided the course complies with the requirements of the Quebec Medical Board.

(5) Persons coming from a recognized College outside British possessions may register on passing the preliminary examination, attending a full course of six months in some Medical College in the Province, and passing the professional examinations.

The penalties which the Medical Board may impose are that any member convicted of felony forfeits his right to registration and shall have his name erased, if registered. If any one practises without registration he shall be subject to a fine of \$50. If he unlawfully assumes the title of doctor, a fine of \$50. Those who have not paid the annual fee have no legal standing nor can they vote. The annual fine for neglect to register, \$5.

The fees are as follows:—admission to study of medicine, \$20; license to practise, \$40; annual fee, \$2; additional degrees, \$1; examination and registration of midwife, \$10.

THE COUNCIL OF PHYSICIANS AND SURGEONS OF NEW
BRUNSWICK.

THIS is the name given the body established by the New Brunswick Medical Act of 1881, and subsequent amendments thereto. The affairs of the profession are managed by this council, which consists of nine persons. Four are appointed by the Governor-in-Council for a period of four years; and five are elected by the New Brunswick Medical Society for three years. All the members of the Medical Council must be legally qualified practitioners of at least seven years' standing. All legally registered practitioners are members of, and constitute the New Brunswick Medical Society. Vacancies on the council are filled by the body, or authority, appointing the member in the first instance. Should the Medical Society, or the Governor-in-Council, neglect, or refuse to make appointments, or fill vacancies, then the Medical Council may make appointments.

There shall be a medical register for the Province, kept by the secretary of the council, who shall be a duly qualified practitioner, and who shall be called the registrar. He shall publish on the first of May, each year, a correct list of all the names on the register on the first of January. Such publication shall be prima facie evidence of registration, or vice versa.

The following persons shall be entitled to register:

(1) All persons who had practised for twenty years prior to the passing of the Act.

(2) All persons who were practising at the time the Act was passed, and who held a degree or diploma from a chartered college or university in any country where such was recognized.

(3) Non resident regular practitioners, residing in the State of Maine, or in the Provinces of Quebec or Nova Scotia, near the boundary line of New Brunswick, whose practices extend into the Province.

(4) Those who comply with the preliminary and professional curriculum of the Council, as follows:

He must pass a matriculation examination on English, Arithmetic, Algebra, Geometry, Latin, Mechanics, Chemistry, Canadian and British History, and any two of Greek, French and German. They must make an average of 60 per cent. and a minimum of 40 per cent. The following are accepted in lieu of this matriculation: The matriculation examination for an under-graduate course in arts or sciences at some college in Britain, Ireland, Canada, the United States, or the continent of Europe or a first-class teacher's certificate from the Board of Education of New Brunswick. The New Brunswick Council matriculation is sufficiently

high to be accepted by Canadian and American colleges, and the Medical Council of Great Britain.

The professional course shall consist of not less than four years, during which time he shall attend lectures in a university, college, or medical school in good standing, for four sessions of six months each. These courses shall include satisfactory instruction on Anatomy, Practical Anatomy, Chemistry, Practical Chemistry, Physiology, Histology, Materia Medica, Pharmacy, Therapeutics, Surgery, Medicine, Obstetrics, Diseases of Women and Children, Medical Jurisprudence, Hygiene, Pathology and Bacteriology.

He must attend a hospital for at least twelve months, of not less than fifty beds, under at least two physicians or surgeons. He must also have passed the examination required by his college on the above subjects, after a full four years' course of study. The professional examinations which he must pass for the license are: Primary, at the end of the second year, and Final at the end of the fourth year. If any person applies for registration as a practitioner of any system, the registered practitioners of that system shall appoint the examiners on Materia Medica, Pharmacy, and Therapeutics. If they fail to do so, then the council shall appoint them.

(5) Those who have passed the examinations required by the sole examining body of another province, wherein the curriculum is equal to that of New Brunswick, provided the same privilege is extended to those holding the license from the Council of New Brunswick.

The council has the following powers: To elect a president and other officers; to regulate the study of medicine; to appoint examiners for the preliminary and professional examinations; to examine all degrees and diplomas presented for registration and demand proof of their genuineness; to cause every person practising in New Brunswick to register; and to make rules and regulations for the study and practice of medicine as may be deemed necessary.

The council has power to impose the following fines and penalties.

(1) Any person entitled to register, who neglects to do so, shall not be entitled to any of the rights or privileges of the act.

(2) Any registered practitioner, who shall be convicted of a felony in court, or shall be judged by the council to have been guilty of infamous conduct in any professional respect, shall forfeit his registration subject to an appeal to the Governor in council.

(3) No person shall be entitled to recover any fee, or charge, unless he is duly registered.

(4) If any person not registered under the act, practises medicine for gain, he shall forfeit \$20 for each day he practises.

(5) Any person who shall wilfully procure, or attempt to procure registration by fraudulent representation shall forfeit and pay a fine of not less than \$100 ; and likewise any person aiding in such fraud.

(6) Any person, who shall wilfully take or use falsely any title, or description, implying that he is registered, shall forfeit a fine not exceeding \$100.

(7) Any registered practitioner, who subjects to pay his annual fee, shall thereby close his registration and his name shall be left off the register when the same is published.

(8) All fines are recoverable by summary conviction before two justices of the peace. In the event of an enquiry being ordered by the council into the conduct of a registered practitioner, notice shall be given of the time and place of such enquiry ; subpoenas may be issued ; and any person neglecting to obey such, is guilty of contempt before the court issuing such subpoenas.

The council imposes the following fees : For the matriculation examination, \$5 ; for supplemental examination on one or more subjects, \$5 ; for the professional examination, \$10 ; and an annual fee of \$1.

THE MEDICAL BOARD OF NOVA SCOTIA.

THE Medical Act of Nova Scotia regulates the practice of medicine and surgery in the province. By this Act, a Medical Board is established. This board consists of thirteen medical practitioners of at least seven years' standing. Seven are appointed by the Governor-in-Council, and six are elected by the Medical Society of Nova Scotia. For this purpose the Medical Society of Nova Scotia is regarded as an electoral, or an incorporated body, for this purpose. The appointed members of the board hold office during good behaviour ; and the elected members, for a period of three years. The board appoints a secretary, or registrar.

The board has power to elect officers ; regulate the study of medicine in respect to preliminary qualifications, course of study, professional examinations : the appointment of examiners to conduct the preliminary and professional examinations ; the examining of all degrees, diplomas, and licenses presented in support of an application for registration, and cause all students and practitioners to register, prior to pursuing their course of medical studies, or engaging in practice.

The following classes of practitioners are entitled to registration :—

(1) Those who are duly registered by the Medical Council of Great Britain.

(2) Those who hold the license of any council or board recognized as the sole examining body for any province in Canada, if the curriculum

for such be equivalent to that for Nova Scotia, may register, provided the same privilege is extended to the registered practitioners of Nova Scotia.

(3) Persons who have passed the preliminary examination of the board, or such examination as the board may accept; who have for four years, of eight months each, attended in a university, college or incorporated school of medicine, a sufficient number of lectures on anatomy, physics, chemistry, physiology, histology, materia medica, pharmacy, therapeutics, surgery, medicine, obstetrics, diseases of women and children, jurisprudence, hygiene, pathology, and at least 18 months in hospital work of not less than 100 beds, under at least four teachers, or twelve months in a hospital and six in a dispensary, which studies are to be made as practical and clinical as possible; who have passed the examinations required on each professional subject of the medical course obtaining the diploma from a recognized college or university; who have received the certificate of qualification from the board, by passing its final examination. Homœopathic students are examined by homœopathic examiners in materia medica, therapeutics, practice of medicine, surgery, and midwifery, except the operative and practical parts. The board accepts in part of the professional examinations of a recognized university, or college, and requires the candidate to pass only the final professional examinations on medicine, including therapeutics, medical anatomy and clinical medicine; surgery, including surgical anatomy, and diseases of the eye, ear and throat; obstetrics and diseases of women and new-born children; and medical jurisprudence and hygiene. These examinations are written, oral and clinical.

The following universities and colleges are recognized as equivalent in the primary examinations: McGill, Toronto, Manitoba, Dalhousie, Halifax Medical College, Laval, Columbia, Coll. Phys. and Surgs. N.Y., Bellevue, Univ. City of New York, Harvard, Boston University, Univ. of Pennsylvania, Jefferson, Johns Hopkins, Univ. of Michigan, colleges recognized in Britain, Univ. of Maryland, College Phys. and Surgs. Baltimore, Univ. N. Y. State.

The preliminary examination covers a thorough knowledge of English, arithmetic complete, algebra, geometry, history and geography, Latin, French, and German or Greek. This examination is accepted by the Medical Council of Great Britain. Graduates in arts or science of a recognized College or University, or those who have passed the entrance examination of the Nova Scotia Barristers' Society are exempted.

The Act gives power to impose the following fines and penalties:— Any medical practitioner who has been sentenced to imprisonment in a

penitentiary, or who has been guilty of infamous conduct in a professional respect, shall forfeit his right to registration, and, if registered, his name shall be erased. A fine of not less than \$100 may be imposed for obtaining registration by misrepresentations. Any person practising without due registration is liable to a fine of not more than \$20 for each day he so practices or advertises. Any person pretending to be a physician or surgeon, or to hold qualifications which he does not possess, shall be liable to a fine, for each offense, of not more than \$100. Any person who is not registered, but uses means to induce people to believe he is registered, is liable to a fine not exceeding \$100. The registrar is liable to a fine of not less than \$100 for every wilful falsification in the registers

The Medical Board imposes the following fees:—for matriculation examination, \$10; for registration as a medical student, \$10. Those who have taken the matriculation examination are registered free. For a supplemental examination, \$5. For the privilege of writing at a locality more convenient than Halifax, \$2 extra is charged for all the above examinations. For the final professional examination, \$35; for re-entry in all subjects after registration, \$20; for one or more subjects, \$5 for each.

THE MEDICAL COUNCIL OF PRINCE EDWARD ISLAND.

BY an Act of the Legislature for the Island, the medical practitioners of the Island are incorporated into a medical society for the purpose of regulating the medical profession of the place. The members of this medical society elect seven of their number to form a medical council, in whose hands the management of the medical affairs of the Island are reposed.

The following points may be mentioned regarding the requirements for registration:

(1) The council admits to registration all such persons as are duly registered by the General Medical Council of Great Britain.

(2) Those who pass the matriculation examinations of the Island on English, arithmetic, algebra, geometry, Latin, mechanics, history, French, and German, or have a degree in arts or a first-class certificate; and, after passing the matriculation examination, attend a recognized medical college for at least four years, one session in each year of such length as the council may approve of, and attend a hospital of not less than 100 beds for twenty-four months; and pass the professional examinations on anatomy, practical anatomy, chemistry, practical chemistry, physiology, histology, materia medica, pharmacy, therapeutics, surgery, clinical surgery, medicine, clinical medicine, obstetrics, diseases of women

and children, medical jurisprudence, hygiene, pathology, bacteriology, and making post mortem examinations.

(3) Persons holding the qualification of the sole examining body of another province, wherein the curriculum is equal to that approved of by the Medical Council of Prince Edward Island, may register, provided the same privilege is accorded by such province to those registered in Prince Edward Island. They must show that they are in good standing, and that there is no charge of wrong conduct against them at the time.

The fees are: For matriculation, \$10; for a supplemental examination, \$5; for the professional examination, \$15; for registration, \$20; and the annual assessment, \$5.

A name may be removed from the register for infamous or disgraceful conduct in a professional respect. The council shall enquire into the case of any registered practitioner against whom a complaint is made, in writing, by any three registered practitioners; and may remove his name, if the charges are proven. The council, on notice to the effect that a registered practitioner has left the Island for two years, shall erase the name, unless requested by the said party not to do so, and his paying the annual assessment.

COLLEGE OF PHYSICIANS AND SURGEONS OF MANITOBA.

THIS college is composed of every registered medical practitioner in the Province, and is the sole licensing body.

Its license to practice is granted upon the certificate of Manitoba University that the holder is a graduate of said University, by examination, or that the party applying is a licentiate of a College of Physicians and Surgeons, or of any other incorporated body of medical men exercising similar powers, in a Province of the Dominion where reciprocal rights are granted to graduates of Manitoba University by examination, and licentiates of the College of Physicians and Surgeons of Manitoba.

The fee for registration and license is \$75.

By the Medical Act of 1885 all the examining powers which previously belonged to the College of Physicians and Surgeons were vested in Manitoba University, and in lieu thereof four members chosen from the Council of the College of Physicians and Surgeons are members of the University Council.

The medical course of the University of Manitoba, accepted by the College of Physicians and Surgeons, consists of:

1. A matriculation examination of the following fixed subjects: Latin grammar, authors, and translations; Arithmetic; Euclid, three books; Algebra, the rules, roots, surds, quadratics, and fractions; English Rhetoric, Composition, and Poetic Literature; History, British and Canadian; Botany, and Physics. The matriculations of the Medical Council of Ontario and Quebec are accepted; also the Certificate of the Council of Great Britain; second class non-professional teachers' certificates of Manitoba, Ontario, or the Northwest Territories; Ontario Junior Leaving, and Arts Degrees from a University in His Majesty's Dominions.

2. A professional course of studies and annual examinations as follows: For the first year, one full course of at least 75 lectures, during a session of eight months, upon Anatomy, Practical Anatomy, Physiology,

60 lectures in Inorganic Chemistry, 25 lectures of two hours on Histology.

For the second year, two full courses of at least 75 lectures over two sessions of eight months on Anatomy, Practical Anatomy, Physiology, Materia Medica and Therapeutics, Practical Medical Chemistry, 40 lectures of two hours, Organic Chemistry.

For the third year, one full course of 40 lectures, over eight months, in Surgical Anatomy, Medical Jurisprudence, 25 lectures on Pathology, 50 lectures on Sanitary Science, and a second course of 75 lectures on Materia Medica and Therapeutics.

For the fourth year, two courses of 75 each in Medicine, Surgery, and diseases of women and children, two courses of 100 each in Clinical Medicine and Surgery; two courses of 50 each on Gynæcology.

He shall also furnish documentary evidence of attending for twenty-four months at some incorporated General Hospital, and also of eight months' practice in a Lying-in-Hospital, or of having had equivalent obstetrical advantages, with a certificate of attendance upon at least eight cases of labor, and also a certificate of having had three months' practice, compounding medicine in a drug store or laboratory of any hospital, or of having attended twenty lectures in Practical Pharmacy at some medical college or school, recognized by the University of Manitoba.

A graduate in Arts of a recognized University in His Majesty's Dominions may complete his course in three winter sessions of eight months each.

The examinations are written, except in the clinical and practical subjects. Fifty per cent. shall be required on each subject for a pass, and 70 per cent. for honors.

For the degree of C. M., the candidate is required to pass on Operative Surgery, and write a thesis in presence of the examiners. Seventy-five per cent. is required.

COLLEGE OF PHYSICIANS AND SURGEONS BRITISH COLUMBIA.

FOR a number of years, there existed in British Columbia an incorporated body, known as "The Medical Council of British Columbia."

This act was amended in 1898 and the name was changed to that of "The College of Physicians and Surgeons of British Columbia." Under this name the physicians and surgeons of the Province are an incorporated body. All persons who become registered to practice are called members of the College of physicians and Surgeons of British Columbia.

From amongst those who are duly registered members of the College of physicians and Surgeons, there shall be elected seven, who shall constitute the council. The members of the council are elected for a period of three years. No one shall be entitled to vote unless he is duly registered; any one in arrears with his annual fee shall be entitled neither to vote for, nor to be elected, a member of the council.

The council shall keep a register of duly qualified practitioners only such as are entered upon the same shall be entitled to practice. The fee for registration shall not exceed \$100, and the annual fee shall not be less than \$2.50 nor more than \$10. The following may register:—

(1) All persons who are registered to practice in Great Britain under the Imperial Medical Act, Vict. 49 and 50, shall be entitled to register.

and who have not lost the benefit of such registration by any misconduct or otherwise.

(2) Any person who has a diploma or qualification from a college or school requiring a four years' course of study; or, if the college or school did not require a four years' course, a post graduate course has been taken, so as to make up a four years' course, when added to that of the college or school, shall be entitled to register on passing an examination. This examination shall cover the following subjects: Anatomy, Chemistry and Public Health, Physiology and Histology, Materia Medica and Therapeutics, Medical Jurisprudence, Theory and Practice of Medicine and Medical Pathology, Theory and Practice of Surgery and Surgical Pathology, Clinical Medicine, Clinical Surgery and Surgical Anatomy, and Obstetrics and diseases of women and children. If the applicant for registration fails, \$50 of the registration, or examination fee shall be returned.

Homœopathic physicians desiring to register shall furnish evidence of holding a diploma from a college or school requiring a four years' course of study. He shall pass an examination upon the subjects of anatomy, physiology, pathology, chemistry, obstetrics, and surgery. One half the fee or \$50 is returned in the event of his failure.

The right of registration may be forfeited, or a name may be erased from the register for the following causes. Any entry on the register fraudulently made by the registrar; any registration falsely or fraudulently obtained by the applicant; any registered practitioner who has been convicted in any court of any felony or misdemeanor, nor shall such be registered should he make application; and, on the application of any two registered practitioners, the council shall cause enquiry to be made into the alleged act of felony, or infamous or unprofessional conduct, or fraudulent act to obtain registration. Should the charge be proven, the name shall be removed from the register.

TRINITY MEDICAL COLLEGE.

THE announcement of Trinity Medical College for 1902-1903 was issued a short time ago. Among other matters of information which it contains, the following may be noted:

The corporation of Trinity Medical College has finally and definitely decided against amalgamation.

Those holding the Diploma of Fellowship from the College are entitled to go up for examination before the Royal College of Surgeons and Physicians in Great Britain and Ireland, with precisely the same exemptions from various parts of such examinations as are allowed to holders of University Degrees.

In addition to the regular work of the session, the following special courses of lectures have been arranged for: Gynæcology, 30 lectures; Genito-Urinary Surgery, 20 lectures; Abdominal Surgery and Hernia, 20 lectures; Brain and Spinal Cord Surgery, 20 lectures; Diseases of the Heart and Lungs, or of the Nervous System, 20 lectures; Diseased Conditions of the Blood and Blood Vessels, 20 lectures; and a special course in Operative Midwifery.

On account of the introduction of the eight months' winter session, no summer session will be held.

In Bilious Attacks and Disorders of the Liver, and in The Treatment of Gall-Stones.

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There is one notable exception :

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is *not* an experiment; it has *not* been a disappointment. Eminent specialists report that this wonderful agent has afforded prompt relief in cases which could not be reached by any other remedy. By its use the nasal discharge is controlled, congestion of the mucous membranes is allayed, the swelling of the turbinal tissues is reduced, the desire to sneeze is abated, and a condition of distress and unrest gives way to one of comfort.

We are of opinion that *Solution Adrenalin Chloride* more nearly approaches the long-sought Hay Fever specific than any other agent, and we believe that this will be the final verdict of the medical profession.

Solution Adrenalin Chloride is supplied in the strength of one part Adrenalin Chloride to 1000 parts normal saline solution, with 0.5 per cent. Chlorotone as a preservative. For use in Hay Fever it should be diluted by the addition of four times its volume of normal salt solution. It may be sprayed into the nose with a small hand atomizer or applied on a pledget of cotton. One or two applications daily usually afford complete relief.

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EDITORIAL.

THE KING'S HEALTH.

ALL the Empire rejoices over the King's recovery. He is now crowned, as the ruler of the mightiest Empire of ancient or modern times. It is true, the Coronation was a much quieter event than if it had taken place on 26th June; but who cares for the absence of a little outward pomp, when all can say, as they do most joyously, "The King lives." Long may His Majesty be spared to grace the throne of the British Empire.

THE DOMINION MEDICAL COUNCIL.

IN this issue of the CANADA LANCET, the standard of Medical Education for the various Provinces is given. From this it would appear that there ought to be no great difficulty in establishing a common standard for the Dominion, as provided for in the Bill, which was carried through the House of Commons last session by Dr. T. G. Roddick, of Montreal.

The Preliminary standard, or Matriculation, in all the Provinces, is a high one. There is not enough difference in any of them to cause the slightest barrier towards the securing of a common one.

In the matter of the Professional standard, there appears to be some differences in the respective Provinces. When these differences are examined, however, they very largely disappear. In all of the provinces, a four years course is required, with the exception of Ontario, which adds on a fifth year for practical and clinical work.

In some of the Provinces, the session is a six months' one, while in others it is one of eight months' duration. In some instances, more hospital experience is called for than in others. There is also some differences in the fees, and penalties, but not sufficient to create an obstacle to a complete understanding between the Medical Councils of the Provinces.

It is a matter for congratulation that the Medical Council for Ontario, at its recent meeting, adopted a resolution to take steps to have the Ontario Legislature pass an Act legalizing the Roddick Bill. It is to

be hoped that the other Provinces will soon fall in line. If the Councils of the other Provinces do as that for Ontario has done, there is no doubt but that the Governments of these Provinces will pass the requisite legislation, to establish a Dominion standard of registration and practice.

In Great Britain, any qualification that entitles the holder to register in Scotland, Ireland, or England, entitles him to practise in either of the other two portions of Great Britain and Ireland. This should be so in Canada. The qualifications for the several Provinces should be made so nearly alike, as to be accepted by a central council or registering body.

No one for a moment would gainsay the great advantages of such a state of affairs. Medicine is a science, and is the same in Prince Edward Island as in British Columbia. To all those who are now registered in any Province, no harm could come by such a change. To those who are yet to qualify, nothing but good could come from a common Dominion standard, and that, too, a high one. In bringing about such an important change there must be some compromise; but the CANADA LANCET would respectfully submit that the standard, now in existence in Ontario, is not too high a one.

MALPRACTICE CASE OF KEMPFER v. DR. J. M. CONERTY.

THIS has been a long and expensive suit for the defendant; but we congratulate him on the complete victory which he has, at last, secured, in the case. This victory is not merely one for Dr. Conerty, but for the entire profession of the country.

A short time ago the CANADA LANCET noted with much pleasure the verdict in the case of *Town v Drs. D. and R. Archer*, of Port Perry. Justice Falconbridge on that occasion delivered a very full and able judgment, and dismissed the action. We also referred to the case *Lynburner v. Drs. Clark and Hopkins*, of Dunnville, in which Justice Ferguson dismissed the action.

These cases, taken along with the case of Dr. Conerty, of Smith's Falls, and tried by Justice MacMahon, constitute a series of great importance to the medical profession of this country. These professional brethren are to be congratulated on the complete vindication they have received at the hands of the three learned justices who heard the cases.

But these verdicts were not obtained for nothing. Victories have their prices, and often come high. Much valuable time and thought must be expended upon such defences, to say nothing of the money. In such cases, it would often be much cheaper to pay something and have done with the matter. It is, therefore, all the more a matter of pride that

these defendants were willing to make any sacrifice rather than that of honor.

It is here that a Medical Defense Association would find useful work to perform. These verdicts are for the good of the whole profession, and ought not to be obtained at the sole cost of the defendants. To the entire profession, the cost of such trials would be slight. To any one member of it, the cost might be very heavy and vexatious.

We hope that the Defense Association may bestir itself among the profession. We would also urge upon the members of the medical profession the advisability of joining the Defence Association.

EDITORIAL NOTES.

The Canada Medical Association.

In the CANADA LANCET for June and July special attention was given to the meeting of the Canada Medical Association to be held, this year, in Montreal on September 16th, 17th and 18th. It is hoped there will be a large attendance.

Bellevue Hospital.

We have much pleasure in directing attention to the announcement of the above Hospital in THE CANADA LANCET.

Canadian Medical Association.

Intending delegates to the thirty-fifth annual meeting of the Canadian Medical Association to be held in Montreal on the 16th, 17th and 18th of September should take note of the following additional information issued from the Transportation Department: Owing to a clerical error relating to points east of Montreal, the announcement should have read—If ten (10) or more delegates are in attendance from Quebec City, Megantic and east thereof, holding standard convention certificates, delegates from such points will be issued tickets, free, for return.

A side trip via the Richelieu and Ontario Navigation Co. has been arranged for to Quebec City from Montreal at \$4.00 for the round trip.

The time limit for delegates attending from points west of Fort William has been extended to the 12th of October, permitting delegates from the west to arrive home by that date.

Delegates may go and return by the Richelieu and Ontario steamers in the usual way by asking for that route and obtaining a standard convention certificate.

The entertainment committee, of which Dr. H. S. Birkett is chairman, has arranged the following programme: Tuesday, a garden party;

Wednesday, the Grand Trunk Railway has invited the members of the Association to inspect the Victoria bridge, and will take them to Lachine where a lunch will be served. In the evening there will be a smoking concert in the Victoria Rifles' Armoury.

A fine list of papers has been promised, which in addition to clinics in the various hospitals and the Pathological Museum will comprise a programme which will prove both interesting and instructive.

Any further information may be secured by applying to the Local Secretary, Dr. C. F. Martin, 33 Durocher St.; Dr. J. Alex. Hutchison, Chairman of the Transportation Committee, 7J McKay St., Montreal, or to George Elliott, 129 John St., Toronto, General Secretary.

The Environments of Childhood.

Dr. Christopher, in his address before the Pediatric Society, in May last, contended that, of the many Environments of childhood, nutrition and infection took a first place. Next came physical and mental activity. Close to these were clothing, dwelling, climate, and discipline. Little was known, as yet, of the influence of nutrition on disease. It was a most remarkable fact that, owing to some condition of the body, scarlet fever was far most frequent during the second two years of life.

Appendicitis.

Sir Frederick Treves, in his Cavendish Lecture on the above subject, states that the death rate in the disease is about 5 per cent. Cases operated upon in the acute stage yield a death rate of 20 per cent., or more. The removal of the appendix in the quiescent period has a mortality of about 1 in 500. Our knowledge of the pathology of the disease and its mortality does not sanction opening the abdomen in every acute case. Immediate operation is, however, always demanded in extra acute cases; and where there is reason to believe suppuration has taken place. In every case of a definite attack, the appendix should be removed during quiescence.

Dr. Geo. W. Balfour on Digitalis.

Digitalis ought never to be prescribed in any case of senile heart without the addition of one or other of the vascular stimulants, and of these iodide of potassium is the most generally useful, acting well and persistently in a moderate dose, and free from any objectionable effect. In all senile hearts, whatever their character or special symptom may be, we must always remember that digitalis uncombined with one or other of the vascular stimulants is never so beneficial as when it is so combined, is certain to produce discomfort, and is very likely to do serious damage.

Abiotrophy.

Sir W. R. Gowers, who has done so much in the way of elucidating the problems of neurology, has recently coined the new and very expressive term, "abiotrophy," which signifies failure of nutrition from defective vitality, from a, bios, and trophe, or absence of life nutrition. He applies the term to those conditions, in which a tissue takes on degenerative changes instead of going on in its normal development. Iodopathic muscular atrophy, myopathic muscular dystrophy, psuedo-hypertrophic paralysis are all examples of disease that come under this term, where some inherent lack of development power exists.

Dr. McCall Anderson on Nervous Syphilis.

Whenever we suspect that a nervous affection is of a syphilitic nature, we should attack it at once with anti-syphilitic remedies, and just as energetically as if we were absolutely certain of our diagnosis. A faltering hand under such circumstances is fatal. A very prevalent belief with regard to the treatment of syphilis is, that mercury is the remedy in the early, and the iodides in the late stages. Though this is true, mercury may succeed in an old case, after the iodides have failed. Push the iodides until the symptoms yield or they disagree with the patient. The best mode of administering the mercury is by innunction.

Advances in Surgery.

Sir John E. Euhsen, in his work on surgery, twenty-five years ago made the statement that operative surgery had almost reached a finality. Looking over those years, one can see how far that great surgeon was wrong. Enormous advances have been made in surgical procedures since the above opinion was uttered. The brain and spinal cord have been freely operated upon, abdominal surgery has come into practical existence during these years, the treatment of deformities and tendon transplantation are mainly within this period. The surgery of the kidneys and the thyroid gland dates within these twenty-five years, for all practical purposes, and that of the prostate gland, etc. A glance at a work on Operative Surgery written then and now shows the great strides that have been taken onwards by this branch of the heading art. In addition to the advances in the scope and range of operative procedures, another noteworthy advance is in the numbers who are competent to perform the most difficult operations. This is due to antiseptics, the general use of anæsthetics, the multiplication of hospitals, and the superior training now given the medical student.

Deciduoma Malignum.

Since 1889, when Sanger described malignant growths in the uterine cavity, following parturition, as arising from the decidua, the term deciduoma malignum has been very common. At the recent meeting of the British Gynecological Society, Dr. Herbert Snow discussed the question fully. He took the position that cancer does not commence during pregnancy. When it shows itself soon after delivery, or abortion, it really had begun before impregnation, and advances rapidly after the uterus is emptied. Decidnoma malignum, as a growth from chorionic tissues, never occurs. The older views are therefore wrong as to its origin.

A Rational Diabetic Diet.

Dr. Rudolph Kolisch, lecturer on medicine at the University of Vienna, concludes an article on the above subject in the following manner:—(1) The treatment of diabetes has to discover the toleration capacity for carbohydrates, and the minimum of nutriment on which the patient can exist, if the demand for food is to be gradually reduced. (2) The toleration capacity for carbohydrates depends upon the foods that are given along with them. It is advisable to limit the quantity of albumen to that absolutely necessary. (3) A vegetable diet agrees with diabetes better than any other, as it contains the minimum of calories and albumin and the maximum of carbohydrates. (4) The proportion of fat must be determined according to the requirements of the diabetic.

Injuries to Nerves.

In a lecture at St. Bartholomew's Hospital a short time ago, and published in the *Lancet* of July 19, Mr. Anthony Bowlby points out that, when a nerve is cut, a slow degeneration sets in upwards, and extends to the cord. There is also a much more rapid degeneration downwards. After this early downward degeneration, there is a partial regeneration of the peripheral portion, even though it does not reunite with the proximal portion. These partially regenerated nerve fibres undergo degeneration subsequently, unless the severed nerve becomes united. He points out also that sensory nerve fibres will unite, though the ends are some distance apart. They seem to have the power to bridge over considerable space. Motor fibres have very little, or none, of this power. The muscles supplied by a motor never rapidly atrophy and degenerate, after the nerve has been divided. When the nerve is sutured, the union is not so rapid, nor so perfect, as to prevent much of the degeneration. But in time the sensation returns, though in a confused manner, as the fibres do not join as they were before the division. The motor fibres

also unite differently to their first condition. This causes confusion of motion, as well as of sensation. The restoration of motive power, even if the suture be immediate, is never perfect.

Medical Coronation Honors.

His Majesty, King Edward, has conferred a number of high distinctions upon the following members of the medical profession: Lord Lister is made a member of the Order of Merit, and also one of His Majesty's Most Honorable Privy Councillors. Sir Frederick Treves and Sir Francis Laking have been created baronets. The order of Knighthood has been conferred upon Mr. Victor Horsley, of London; Dr. William Macewan, of Glasgow; Dr. Isambard Owen, Chancellor of the University of Wales; Prof. T. R. Fraser, of Edinburgh; John Halliday Croom, of Edinburgh; Mr. H. G. House, President R.C.S., England; Mr. Thomas Myles, P.R.C.S.I., of Dublin; Dr. W. J. Collins, Honorary Secretary, League of Mercy; Mr. Alfred Cooper, of St Mark's Hospital, London; Dr. A. Conan Doyle, Author, and who did such good service in South Africa; Dr. William Church, President, R.C.P., London; and Hon. Frederick W. Borden, M.D., Minister of Militia, Canada.

Digestive Ferments.

Dr. John C. Henmeter remarks in *Medical News* that one of the commonest mistakes made in the treatment of indigestion is the indiscriminate prescribing of pepsin and hydrochloric acid. It may be laid down as a rule that if there be free hydrochloric acid, there is also sufficient pepsin. It is much better to get the stomach to form its own pepsin than to supply it. Pepsin is not regarded by the writer as worthy of much attention, and he has ceased to employ it. With regard to pancreatin, the writer states that it should not be given with pepsin, nor in a hydrochloric acid combination. There is only one indication for the use pancreatin, the permanent deficiency of hydrochloric acid, and enzyme formation of the stomach. In this case it should be given in doses of 4 to 8 grains, with the same quantity of sodium bicarbonate, in tablets. Two to four of these are taken 15 minutes after meals. As far as possible avoid the use of digestive ferments.

Gastralgia.

Many patients present themselves, complaining of pain in the stomach. It is not safe to diagnose cancer or ulcer, because there is pain. Nor is pain a necessary evidence of dyspepsia. Many suffer from pain in the stomach who are not the subjects of this condition. It is worthy of note that very many cases of pain in the stomach can be cured by the administration of arsenic.

OBITUARY.

THOMAS H. WATT, M.D., M.R.C.S., ENG.

Dr. Watt died at Niagara-on-the-Lake, July 3rd in the 80th year of his age.

J. T. SUTHERLAND, M.D.

Dr. J. T. Sutherland died suddenly, July 11th., of heart disease in his home at Leamington, where he had practised since 1883. A widow survives him.

JAMES K. JOHNSTONE, M.D.

Dr. Johnstone, of Thorold, graduated at Victoria University in 1870. For a time he practised at Elizabeth, N.J., and Greensville, Ont. He went to Thorold in 1879, where he continued until his death, a few weeks ago.

T. H. HORSEY, M.D., M.P.

We regret exceedingly to record the tragic death of Dr. Horsey, of Owen Sound. He was in the engine room of the Sun Portland Cement Works, on July 23rd, when the flywheel burst. He was struck on the head, receiving a severe scalp wound, fracture of skull, and brain injury. He lived only a few hours. Dr. Horsey was a graduate of Queen's, Kingston, and had been practising in Owen Sound since 1888. A few years ago he travelled extensively in China and Japan. He was elected to the House of Commons, for North Grey, in 1900. He was an able and fluent speaker. He was the originator of the Victoria Day Bill. His wife is the daughter of Dr. McDonald, member for East Huron. We extend to Mrs. Horsey our sincere sympathy.

PERSONAL.

Dr. J. H. Bell, of Kingston, has been seriously ill.

Dr. Brooks is leaving Tottenham for Gore Bay.

Dr. Frank C. Trebilcock has located in Enniskillen.

Dr. Meek, of London, has gone on a trip to England.

Dr. Loughheed, formerly of Petrolia, has located in Strathroy.

Dr. O. Weld, of Vancouver, B.C., has gone on a trip to Australasia.

Dr. W. H. Drummond, of Montreal, sailed for Glasgow July 16th.

Drs. Olmsted and Malloch, of Hamilton, left on July 30th for Muskoka

Dr. Bruce Riordan has returned from his holidays, New London, Conn.

Dr. R. Casgrain, of Windsor, left in the early part of July for England.

Dr. G. Sterling Ryerson returned in the latter part of July from England.

Dr. Rogers, of Ingersoll, is recovering from an attack of typhoid fever.

Dr. Brett, of Banff, was taken suddenly ill with appendicitis July 13th.

Dr. Winnett arrived home from the Old Country in latter part of July.

Dr. Lorne Robertson has gone into partnership with his father in Stratford.

Dr. George S. Young, of Prescott, was married to Miss Eva Greenhill on 1st July.

Dr. Wishart, of London, has returned from his visit to England and the Continent.

Dr. H. P. H. Galloway, of Toronto, has been visiting at Rat Portage and Winnipeg.

Dr. Geikie, of Toronto, has been spending his holidays in the Maritime Provinces.

Dr. Fissette, of Brantford, has gone to New York for a post graduate course of study.

Dr. Gordon Draeseke has been appointed house surgeon to Toronto Western Hospital.

Dr. J. M. Bell and Miss Ada Hynds, both of Acton, were united by marriage on July 2nd.

Dr. Crane, of Wallacetown, has returned home after a visit to the New York hospitals.

Dr. J. A. Ashbaugh, Medical Health Officer of Windsor, has recovered from his recent illness.

Dr. Colin G. Robertson, a recent graduate of McGill, is going to locate in Vankleek Hill

Dr. Alfred C. Walker and Miss Anna Gould, both of Simcoe, were married in the end of June.

Dr. J. MacRae, of Johns Hopkins Hospital, Baltimore, recently visited his parents at Guelph.

Dr. Claude Wainwright, has been appointed house surgeon to St. Michael's Hospital, Toronto.

Dr. J. S. Niven, of London, had an attack of blood poisoning in the hand a short time ago.

Dr. Colthurst, of Bothwell, and Miss Helen Amos, of St. Mary's, were united in marriage on July 16th.

Dr. Samuel McCallum, of Thornbury, and Miss Maude E. Andrews, of the same place, were married July 3rd.

Dr. J. T. Clarke, of Toronto, entertained Lieut. J. A. Roberts, just returned from South Africa on 24th July.

Dr. J. C. Mitchell, late of Enniskillen, has been appointed to the staff of the Asylum for the Insane, Toronto.

Dr. T. J. Moher, of Peterborough, has been appointed assistant superintendent of the Asylum for Idiots at Orillia.

Dr. D. J. Gibb Wishart, of Toronto, is spending the month of August, on his island at the Madawaska Club, Go-Home Bay.

Dr. Macdonald, late house surgeon Toronto General Hospital, has gone into partnership with Dr. Jameson of Durham.

Dr. Lett, owing to ill health, has resigned his position in the Home-wood Retreat at Guelph. He is succeeded by Dr. A. F. Hobbs.

BOOK REVIEWS.

METARSAL FRACTURE.

Reprinted from *American Medicine* of April.

A PAMPHLET has been issued by the Pennsylvania Society for the prevention of Tuberculosis, containing the report for the year ending March, 1902. The report contains much useful information for the prevention of this disease. The topics covered by the report are:— How to avoid contracting the disease; how persons suffering from tuberculosis can avoid giving the disease to others; how hotelkeepers, storekeepers, and manufacturers can help to prevent the spread of the disease and the predisposing causes and how they can be overcome. The pamphlet is for free distribution.

INTERNATIONAL DIRECTORY OF LARYNGOLOGISTS AND OTOLOGISTS

This little book will prove useful to those engaged in the above specialties.

HAY FEVER AND ASTHMA.

THE author contends that we cannot cure the nervous side of these cases, nor can we prevent dust from entering the nostrils. The only means of cure, therefore, lies in the removal of growths, exostoses, or thickened mucous membrane, and the straightening of deviated septa. He condemns the use of the cautery.

FIRST AID TO INJURED AND SICK.

THIS is a pocket book, bound in limp covers, containing 300 pp. It is full of the most trustworthy information, carefully arranged. The illustrations are numerous and excellent, and the typography is all that could be desired. We can cordially recommend this handy little volume.

THE JOHNS HOPKINS HOSPITAL REPORTS.

Vol. X, Nos. 3, 4 and 5.

Baltimore: The Johns Hopkins Press, 1902.

THE contents of the present fasciculus are: (1) The pathological changes in Hodgkin's disease, with special reference to its relation to tuberculosis; (2) diabetes insipidus; (3) observations on the origin and occurrence of cells with eosinophile granulations in normal and pathological tissues; and (4) placental transmission, with report of a case during typhoid fever.

It would be quite impossible to review in extenso this interesting report. The articles are well illustrated, and the investigations have evidently been conducted in a very thorough manner. We shall content ourselves by giving the readers of THE CANADA LANCET the main conclusions arrived at in the above named studies.

Hodgkin's disease is studied by Dorothy M. Reed, M.D. The conclusions drawn from these studies of cases and the literature upon the subject are:

(1) We should limit the term Hodgkin's disease to designate a clinical and pathological entity, the main features of which are painless

progressive glandular enlargements, usually starting in the cervical region, without the blood changes of leukaemia.

(2) The growth presents a specific histological picture, not a simple hyperplasia, but changes suggesting a chronic inflammatory process.

(3) The microscopical examination is sufficient for the diagnosis. Animal inoculation may confirm the decision by its negative results.

(4) Eosinophiles are usually present in great numbers in such growths, but not invariably. Their presence strengthens the diagnosis.

(5) The pathological agent is as yet undiscovered. Tuberculosis has no direct relation to the subject.

The second subject is that of diabetes insipidus, which is ably discussed by Dr. T. B. Fletcher, a graduate of Toronto.

His conclusions are: The old classification of diabetes insipidus under the headings of hydruria, azoturia, and anazoturia is no longer tenable, the nitrogenous constituents of the urine being almost entirely dependent on the nature of the food. Diabetes insipidus comes under two classes, the primary or idiopathic, without organic basis; and the secondary or symptomatic, where there is some organic change in the nervous system or abdominal viscera, etc. Tumors involving the medulla and floor of the fourth ventricle, cerebral hæmorrhages, and basilar meningitis are the commonest organic lesions causing the disease. Syphilis appears to be a cause oftener than is supposed, most frequently by a basilar meningitis. Diabetes insipidus is a rare disease, occurring about once in every 100,000 cases of sickness. Four of the five cases gave evidence of cerebral disturbance, and the ages were 44, 32, 25, 36, and 35. They were all males. In all five cases, thirst was the first symptom to attract attention. The nature of the disease is uncertain, but there is some nervous disturbance, causing a vaso-motor derangement of the renal vessels and constant congestion of the kidneys. The most frequent changes found after death are enlargement and congestion of the kidneys. The treatment must be directed to any discoverable causes.

The article on placental transmission by Dr. Frank W. Lynch is of much interest. He concludes that the typhoid bacillus may pass from the mother to the child in utero. The resulting disease in the factus is a septicæmia. In cases of placental transmission there are usually placental hæmorrhages. The child usually dies in utero or soon after birth. The placental transmission of infection does not always happen in typhoid fever.

MISCELLANEOUS.

ANTI-KAMNIA AND SUBSTITUTES.

THE Antikamnia Chemical Company is determined to put a stop to all substituting and counterfeiting on their preparations, as shown by their prosecutions in New York and New Orleans.

BOVININE FOR CHILDREN.

DR C. W. Price, of Richmond, Maine, has used Bovinine with excellent results in saving starving bottle-fed babies. This corresponds with the experience of Dr. T. J. Briggs, of Stamford, Conn., who finds it useful in the anæmia and constipation of children.

ADRENALIN IN HAY FEVER.

THE application of adrenalin chloride, 1 part in 5,000 parts normal saline solution is a good spray for the nostrils in hay fever. It may be applied on a pledget of cotton wool in the strength of 1—1000. A few drops of the weaker solution may be instilled into the eyes.

GLYCO-THYMOLINE IN DIARRHŒA.

DR. M. A. Auerbock, writing on the summer diarrhœas of children speaks very highly of the flushing out of the colon with glyco-thymoline (Kress and Owen) of the strength of 25 per cent. solution made with iced water. The glyco-thymoline may be given internally, alone or in combination.

COLCHI-SAL.

EDMUND Gros, M.D., Paris, writes in high terms of the value of Colchi-Sol (Fougera) in the treatment of the many affections that arise from an excess of uric acid in the system. Some of these affections are gout, rheumatism, asthma, some forms of bronchitis and dyspepsia. eczema, urticaria, migraine, neuralgia, etc.

STEARNS ANTITOXIN.

THE Stearns Biologic Laboratory of Detroit, have decided to put out the regular antitoxin with their special bulb syringe. Heretofore they have confined the syringe to the concentrated serum. As their

antistreptococcic, as well as both concentrated and regular antidiphtheretic serums are now offered with this very convenient device, it should materially increase the use of Stearns biologic products.

SANMETTO IN IRRITABLE AND ATONIC CONDITIONS OF THE GENITO-URINARY ORGANS.

F. A. Cromley, M. D., Gallipolis, Ohio, has used sanmetto quite extensively in his practice for a number of years, and has learned from the universally good results obtained from its use to pin his faith to it in all irritable or atonic conditions of the genito-urinary organs. He finds it the true aphrodisiac in both male and female patients. Since he has used sanmetto pro-statitis has lost much of its terrors and cystitis has ceased to be the grave disease it was before its use. I shall continue to prescribe sanmetto.

AN ANALYSIS OF HUMAN CHYLE.

THE opportunities for making a satisfactory analysis of the human chyle are so rare that more than ordinary interest attaches to the report by E. Wace Cartier in the *British Medical Journal* for July 19th. An accidental wound of the thoracic duct near its entrance into the veins permitted the collection of the fluid. The case was a healthy girl, aged ten. The first collection of 55 c. cm., exuded between 11 a.m. and 5 p.m. during which time a meal had been taken gave the following result on analysis:

Water, 98.12 per cent.	} Total solids,
Fat, lecithin, cholesterin, 4.88 per cent.	
Mineral salts, proteids, etc., 3.00 per cent.	

The other sample was mixed chyle and lymph, collected during the succeeding two and a half days, till all flow ceased, and was by analysis:

Water, 92.519.	} Total organic solids,	
Fat, lecithin, cholesterin, 2.820.		
Proteid, 3.840.		
Fikrin and other organic substances, 0.391.		7.051.
Na Cl, 0.155.	} Total mineral matter,	
Other salts, 0.275.		0.430.
		Total solids, 7.481.

These results coincide fairly closely with those of other observers, except that the fats in the first case are higher—due probably to the recent injection of food—and the amount of Na Cl smaller.